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ABSTRACT

In June 1988, the Director of the University of Missouri-Columbia libraries appointed a five-person task force to evaluate the libraries' service to undergraduates. The task force undertook an intensive year-long study of four areas: services, collections, facilities, and cooperation with other academic units. Twenty staff members were recruited to serve on subcommittees which were charged with describing, assessing, and making recommendations in each of these areas. Most of the study focused on service provided at the Ellis Library, but service to undergraduates in the branch libraries was also appraised. A common theme of the recommendations was the need for more publicity about library services. The subcommittee advised that the libraries develop a public relations program to publicize its services and designate a staff member to coordinate and implement the program. Recommendations carried out during the period covered by the study include: the installation of professionally produced signs; the hiring of two additional full-time shelving staff members and relocation of the shelving room; discontinuation of the practice of circulating bound journals to undergraduates in an effort to make the journals more available to all; and consolidation of the oversized book collection. (SD)

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Library Services to Undergraduates

University of Missouri-Columbia
Libraries

Final Report

July 18, 1989

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IR053182

Executive Summary

Introduction

In June 1988, the Director of Libraries appointed a five person Task Force to evaluate the Libraries' services to undergraduates. The campus as a whole was in the process of renewed commitment to provide the best possible education to undergraduates. This commitment produced a number of undergraduate initiatives including an improved Honors College and renewed commitment to the campus writing program, establishing a "freshman year experience" course, improving undergraduate retention and strengthening graduation requirements, instituting workshops to improve teacher competence, general curriculum review and state mandated assessment of undergraduate programs. While excellent library service to undergraduates had always been a goal, a study focusing on this user group was considered timely in light of the renewed campus commitments.

The Task Force undertook an intensive year-long study of four areas: services, collections, facilities, and cooperation with other academic units. Twenty staff members were recruited to serve on subcommittees which were charged with describing, assessing, and making recommendations in each of these areas. Most of the study focused on service provided by Ellis Library but service provided by branch libraries was included when they served undergraduate programs. The Executive Summary contains the conclusions of those four groups.

During the period covered by the study, a number of recommendations made by the Subcommittees were implemented by the Libraries. The Shelving Room was relocated in the old Staff Lounge (Recommendation 27), two additional full time shelving staff members were hired (Recommendation 27), the oversized collection was consolidated and moved to 4 West (Recommendation 28), professionally produced signs were installed (Recommendation 31), and bound volumes of journals no longer circulate to undergraduates in an effort to make them more available to all (Recommendation 9).

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Executive Summary of Recommendations

I. Services to Undergraduates Subcommittee

GENERAL RECOMMENDATION

A common theme throughout the Service report is the need for more publicity about library services. The Subcommittee recommends that the Library develop a public relations program to publicize its services and designate a staff member to coordinate and implement the program. The need for centralized publicity is specifically mentioned in Recommendations 1, 14, and 18, 24.

PROGRAM RECOMMENDATIONS

Reference and Automated Reference Services

Recommendation 1.

Obtain undergraduate input on how to publicize and improve reference service. Undergraduate input is also needed to determine which hours service should be offered and how to improve arrangement of reference sources.

Recommendation 2.

Insure that adequate staffing levels are maintained at the Reference Desk. Institute continuing education for all public service staff to make them more aware of the wide range of services offered by the Libraries, and improve their reference techniques and knowledge of sources. Employ objective measures to evaluate reference service and staff in order to help improve service to undergraduates.

Recommendation 3.

Develop a policy giving MU students priority over non-university patrons when both need heavily used resources such as INFOTRAC and other CD-ROMS.

Recommendation 4.

Install at least 2 more INFOTRAC terminals. Acquire additional CD-ROM indexes appropriate for undergraduate use to improve their access to scholarly journals. Investigate use of networking technology to allow CD-ROM work stations to access multiple disks.

(See Recommendation 37 in the Facilities Subcommittee Report). Investigate more aggressive methods of publicizing Litquest and Litquest/After Dark to insure access to databases not available in the library on CD-ROM.

Undergraduate Instruction

Recommendation 5.

Establish a Committee on Bibliographic Instruction to work with the Bibliographic Instruction Coordinator. Together they should develop a comprehensive plan for bibliographic instruction in MU Libraries which includes goals, objectives, a policy statement, a plan for implementation, and evaluation of resources required to implement the proposed plan. Adopt a philosophy of teaching that emphasizes active rather than passive learning. Communicate with the librarians, faculty and university administrators regarding the benefits of integrating library instruction into the academic curriculum.

Recommendation 6.

The Committee on Bibliographic Instruction should evaluate the entire BI program. The Subcommittee recommends developing a library component to the Freshman Experience Course. Library tours should be evaluated and upperclass students and library wide staff should participate in conducting them. (See Recommendation 18). The Committee should evaluate term paper assistance, workshops, seminars, Library Skills and consider developing self-directed exercises for course-related instruction.

Recommendation 7.

Change the reporting structure so that the Bibliographic Instruction Coordinator reports directly to the Head of Reference in order to give more emphasis and support to the program. Reassign an existing reference position to assist the BI Coordinator.

Access to the Collections

Recommendation 8.

Remove the restrictions on undergraduates' evening use of the Health Sciences and Law Library. Explore easier building access to the Veterinary Medical Library at night.

Recommendation 9.

Institute a trial program of mail renewals for faculty and staff, with the possibility of later extending the service to students. Limit to two the number of times an item can be renewed by mail. Change Ellis Library's circulation policy so that bound journals cannot be checked out by undergraduates in order to increase availability.

Recommendation 10.

Increase shelving staff so that materials can be handled more promptly. (See Recommendations 16 and 27).

Recommendation 11.

Raise the maximum fine amount from \$5.00 to \$10.00. Raise the billing service charge from \$5.00 to \$10.00. Consider refunding only half (\$5.00) upon a student's return of an item; continue to cancel full amount for faculty/staff.

Recommendation 12.

Form a task force to consider the pros and cons of a "reservation" service for reserve materials. Increase the maximum fine on reserve items from \$10.00 to \$15.00. Put a hold on a student's borrowing privileges when a two-hour reserve item is kept more than 24 hours overdue.

Recommendation 13.

Form a task force to study the process of placing interlibrary borrowing requests to identify options for hastening the service. Publicize the availability of existing reciprocal borrowing arrangements to undergraduates. Explore the possibility of adding private colleges in Missouri to the MIX program.

LUMIN

Recommendation 14.

Increase awareness of LUMIN and LUMIN access by better utilization of existing methods and forums (for example, dorm newsletters, Maneater, departmental and college publications). (See Recommendation 42). Evaluate LUMIN printed handouts, signs, and terminal displays for re-design or updating. Provide LUMIN access information and dialup instructions at the Campus Computing sites. Improve staff assistance by relocating the Information desk and/or the LUMIN terminals so they are physically closer to each other. Re-evaluate the original LUMIN/Card Catalog configuration recommended by the Card catalog/LUMIN Task Force of July, 1982. Provide a printer and switch for every other terminal and a stool for use at each terminal. Provide more work space between terminals. Place terminals on other floors within Ellis. (For more detail on locations, see Recommendation 34 of the Facilities Subcommittee). Form a standing LUMIN committee to monitor equipment needs and research replacement equipment. Increase undergraduate input to the LUMIN Users Committee.

Recommendation 15.

Investigate the possibility of a CD-ROM backup when the LUMIN system is unavailable to provide temporary access to the collections and alleviate patron and staff frustration.

Interviews with Undergraduates

Recommendation 16.

Shelve books/journals more promptly. (See Recommendations 10 and 27). Extend the hours the Libraries are open. Provide better signs, maps and other directional assistance. (See Recommendation 31). Provide a lounge for drinks/smoking/relaxation. Provide special rooms for activities such as small group and absolute silence study. Provide lounges for taking study breaks. (These would not necessarily allow drinks/smoking but rather provide a more comfortable, informal atmosphere). (See Recommendation 42). In planning for the new addition, consider providing an intensive study area with 24 hour access.

Recommendation 17.

Provide more computer access (including INFOTRAC and CD-ROMs). (See Recommendations 4 and 35). Improve the LUMIN system, especially subject searching. Clean up records, make series searches easier, provide more assistance in using LUMIN.

Recommendation 18.

Improve communications about what the Libraries have to offer (TAPS, tours, resources & collection, workshops, etc.) by working through student groups with information and publicity. (Also see Recommendation 42). Consider training students to be "Library Ambassadors" to give tours, to serve as resource persons (especially for international students), and other tasks. (See also Recommendation 6). Send out very basic information about library services for posting in dorms, student group offices, etc. Publicize services in the Maneater. Consider having a marketing or journalism student design a library publicity program as a senior project.

Recommendation 19.

Devise a condensed version of Library Skills that could be taught in a few sessions rather than over a semester. Develop topical or special focus classes (e.g. How to do a research paper in ____). Offer evening sessions and discounts on books at the bookstores for those completing the mini-courses. Offer sessions devoted solely to using computer tools such as LUMIN and CD-ROMs.

Recommendation 20.

Consider forming an Undergraduate Library Committee as a forum for ongoing exchange of ideas between the Libraries and students. (See Recommendation 1 which recommends more undergraduate input).

II. Library Collections Subcommittee

Recommendation 21.

Provide last resort LUMIN and stack assistance. This service would be two-fold: provide assistance in locating books and teach students how to locate materials in the future.

Recommendation 22.

Share the information gathered in the Availability Study with the Instruction Coordinator and other interested Library staff. In particular, the discovery that over 90% of the undergraduates could successfully conduct LUMIN author/title searches implies that current LUMIN instruction and user support for this function is adequate. This and other information provided by the study could be useful in directing limited instructional resources towards other types of LUMIN searches.

Recommendation 23.

Generate "purchase alerts" from the new circulation system and forward them to the appropriate selector. Explore the new usage statistics.

Recommendation 24.

Designate Undergraduate book fund allocations with dollars to be spent specifically on library purchases for undergraduates. A formula should be used to specify a percentage of each discipline's monies to be spent on undergraduate materials. The Collections Subcommittee has derived a model formula to be evaluated by the Collection Development Committee and the Library Administration. It may be possible to request the Approval vendor to develop a separate profile that will identify key undergraduate titles. If so, it may be desirable to transfer these funds to the Approval budget rather than retaining them in the firm order allocations.

Recommendation 25.

Since the Books for College Libraries tape will not be available before this Subcommittee has completed its work, refer this project to the Collection Development Committee for their information and action. The Collection Development Committee should consider preparing a one-time-only purchase request to acquire all of the titles in BCL3 which are not owned, but are still available.

Recommendation 26.

The Preservation Librarian should examine the undergraduate collections and make assessments and recommendations about the condition of the collections.

III. Facilities Subcommittee

Physical Layout, Shelving and Re-Shelving:

Recommendation 27.

Convert the present Staff Lounge into a Shelving Room and 4E61 into an office for shelving staff. (Note: this recommendation was completed Winter Semester 1989). Hire additional Shelving Department staff to expedite books being returned to their place in the stacks and eliminate the need for Reshelving areas on various floors. (Note: two additional full time staff members were hired in Winter 1989, but additional staff is still needed to eliminate the reshelving areas in the stacks. See Recommendations 10 and 16).

Recommendation 28.

Rearrange the entire circulating book collection in Ellis into one logical sequence of A-Z for Library of Congress and 0-999 for Dewey materials. Establish a general traffic pattern within the building from top to bottom and east to west. Arrange the oversized materials into an A-Z and 0-9 sequence using standard sized shelving in order to provide more suitable housing for oversized materials and make them easier for patrons to locate. Move the entire oversized collection to the 4th Floor West stacks. (Note: this Recommendation was completed in Summer 1989).

Study Space:

Recommendation 29.

Add study carrels to various locations in Ellis Library as explained in (Recommendation 29) of the full Subcommittee Report. Explore the possibility of utilizing the present Library Instruction Rooms on the 4th floor as study space when they are not being used for instruction. Replace locked carrels with open study spaces as carrels are vacated in the West tier stacks. Plan for significant additional study space in any future addition to Ellis Library. (See Recommendation 16). Explore the use of locations outside of Ellis Library as designated campus study areas (Brady Commons, Memorial Union, and campus cafeterias are possibilities. Note: this recommendation was resoundly rejected by undergraduates in the Rap Session conducted by members of the Services Subcommittee, however.)

Bibliographic Instruction Facilities:

Recommendation 30.

Remove the non-matching chairs in both bibliographic instruction rooms to give the rooms visual consistency. In Instruction Room II the metal folding chairs should be replaced with chairs with arms

for note taking. New instruction rooms, in easy-to-find locations, should be included when designing the next addition to Ellis Library. A seminar room equipped for A-V presentations should be built along with two bibliographic instruction rooms. The instruction rooms should be closer to the first floor public service areas to make the combination of tours with instruction sessions easier and to facilitate the bringing of reference tools to sessions. The rooms should not be as long and narrow as the present instruction rooms and should contain built-in black boards and projector screens. Tables equipped to accommodate computers, projectors and other state-of-the-art audio-visual equipment are also needed in the rooms.

Signage:

Recommendation 31.

Install large, stencilled professionally produced signs to identify the main service points in Ellis Library. (Note: this recommendation was implemented and signs installed over Christmas Break 1988-89). Signs identifying other points in the library have been submitted on bid and are waiting installation. Once professional signs are installed, the Library can examine problem areas to see how other signs can be streamlined and consolidated. (See also Recommendation 42).

Branch Libraries:

Recommendation 32.

Fund and implement the expansion and renovation project already planned for the Journalism Library as soon as possible. Significant additional space should be made available to the Mathematical Sciences Library, otherwise the collection will need redefinition. It could become a static collection, where older books are transferred to storage as new materials are acquired; or books on a particular subject might be separated from the existing collection and transferred to another branch or Ellis Library. The computer science collection is a logical candidate for transfer to Ellis, because it is heavily used by students from all disciplines on campus.

Audio-Visual Facilities:

Recommendation 33.

Consider locating a walk-in Library-model audio-visual instructional facility in a new addition to Ellis Library. Ellis and the branch Libraries should house A-V instructional materials in support of the instructional programs of the campus, with technical supervision and support provided through the Academic Support Center (ASC). ASC should become a cataloging center and their holdings entered into LUMIN. ASC should implement a comprehensive program of cataloging and circulation/rental control for the Film Library.

Computers, Equipment and Labs: (all summarized)

Recommendation 34.

Install additional LUMIN terminals on the 2nd, 3rd and 4th floors of the east side of Ellis. Locate two LUMIN terminals in the new location of the Recorded Sound Collection on the 2nd Floor Central of Ellis. (See Recommendation 39). Evaluate adding terminals to the west side of Ellis Library, utilizing the protocol converter in the Special Collections department. Install up to six more LUMIN terminals in the first floor catalog area and add printers and stools for every other terminal. Consider either relocating the main floor information desk or the LUMIN terminals so they are in closer proximity to each other. Publicize the availability of dial-up access to LUMIN. (See Recommendation 14).

Recommendation 35.

Double the size of the Ellis Library microcomputer lab by using the present adjacent Library Instruction Room II (provided additional instruction rooms are available in the new addition). This would allow space for a total of twenty-four microcomputer workstations in the lab. The Subcommittee recommends that in any expansion of Ellis Library, the lab should be enlarged to accommodate up to fifty workstations and it should be relocated in a central location. The Subcommittee recommends that the microcomputer lab consistently maintain the same hours of operation as Ellis Library even during Spring Break and Intersessions. (See Recommendation 17).

Recommendation 36.

Add six new typewriters for student use outside the present Ellis Library microcomputer lab. Insure that they are regularly maintained.

Recommendation 37.

Acquire a test compact-disk workstation for use by staff and patrons. Evaluate the prospect of network access to CD-ROM databases. (See Recommendation 4).

Recommendation 38.

Replace the seven older copy machines in Ellis Copy Service with new Xerox machines. Install additional coin operated copiers in the Current Periodicals Reading Room and explore the possibility of using charge cards or MU ID's with copiers. Purchase two additional coin operated microfilm reader-printers and plan for the acquisition of new microfiche readers especially in the Reference area.

Recorded Sound Facility:

Recommendation 39.

Move the Recorded Sound collection to 2nd Floor Central Ellis Library.

IV.

Cooperation With Other Academic Units Subcommittee

Recommendation 40

Appoint library liaisons for other academic units on campus needing library service. Liaisons would be responsible for maintaining contact with these units, distributing various library materials, and keeping them informed of library events, services and resources.

Recommendation 41

Because the need for greater contact between the library and other academic units, the library should hold an annual meeting and invite representatives of all the other divisions on campus. It should feature a brief presentation on library services, introduce key staff, explain library resources and future events, allow a few questions from participants and conclude with an informal reception.

Recommendation 42

Assign a department in the library the responsibility for coordinating library publicity of interest to other units on campus. (See the general recommendation for publicity in the Services Subcommittee report and Recommendations 14, and 18). Librarians should contribute articles to newsletters published by other academic units, use the NIZZOU WEEKLY to communicate with faculty and regularly advertise Library programs in the MANEATER. Display library brochures explaining how to find library materials more effectively using racks or stands rather than tables. Clearly mark all service areas in Ellis so that students can easily find them (See Recommendation 31.) Explore the use of non-print media, such as videotapes, to present information about the library to undergraduates and show it at various sites on campus. Make a lounge area in Ellis where anyone might go for a short study break. (See Recommendation 16)

Recommendation 43

Librarians should participate in General Honors 35, a one hour discussion course on academic topics, sponsored by the Honor's College and should work on creating an Honor's Section of Library Skills.

Services

**Library Services to Undergraduates
Services Subcommittee**

Services Subcommittee Members:

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Erlene Rickerson
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The university library offers many specialized services to students, faculty and staff. Although separate undergraduate statistics are not available for the majority of these services, most are heavily used by at least a sizable portion of MU undergraduates. This is known from encountering large numbers of undergraduates at the reference desk, examining library skills enrollment and tour participation and observing students at various service points in the library. Although at the present time the library has few formal methods of obtaining student feedback about its services, the Subcommittee culled undergraduate responses from recent library use and LUMIN surveys, conducted several user and non-user studies of its own including a questionnaire given to undergraduates at Brady Commons, a rap session with student leaders, an information desk staff poll and a survey of Big 8 Bibliographic Instruction Coordinators. The Subcommittee also examined statistics from various sources including the reference and information desks, bibliographic instruction, LITQUEST and LUMIN. This data, provided insight into undergraduate awareness and use of the library and allowed the Subcommittee to generate the following recommendations for improvement of services.

This section of the report examines the most important library services and resources available to undergraduates: Reference and Automated Reference Services, Bibliographic Instruction and Tours, LUMIN (online catalog), and Access Services. The final section, Interviews with Undergraduates, summarizes undergraduate evaluations of library services. The Subcommittee described, assessed and made recommendations for improvement of each service.

I. Reference and Automated Reference Services

1. Reference Service

Description

Since education is the primary mission of the university, reference service at a university library involves not only answering undergraduates immediate questions but also involves instructing them in the use of materials necessary to complete reports, class assignments and term papers. At the Reference Desk undergraduate instruction is done on a one-on-one basis showing students how to use LUMIN and the card catalog, print and computerized periodical indexes, biographical indexes, statistical sources and a whole range of reference tools to assist them with class assignments and other educational needs. The Reference Department prepares hand-outs and subject oriented search guides in advance of each semester listing special library services, hours, and information on how to find material on popular topics.

Reference Service is provided to undergraduates at the Ellis Reference Desk a total of 78 hours per week during the regular semester:

Mondays-Thursdays	8AM-9:30PM
Fridays	8AM-5:00PM
Saturdays	10AM-5:00PM
Sundays	Noon-5:00PM; 6:30-9:30PM

In 1987/88, staff at this desk answered 99,224 reference questions. A combined total of 132,836 reference questions were answered by Ellis and the branches most frequented by undergraduates (Engineering, Geology, Journalism, Math). It is safe to say that a large percentage were asked by undergraduates.

Hours Ellis and the various branches serving undergraduates are open are listed below in Figure 1.

MU CAMPUS LIBRARY HOURS

	ELLIS	ENGINEERING	GEOLOGY	JOURNALISM	MATH SCIENCES
MONDAY	7:30 A.M. TO MIDNIGHT	8:00 AM-5 PM 7:00-10 PM	8 A.M.-12 P.M. 1 P.M.-5 P.M. 7 P.M.-10 P.M.	8:00 A.M. TO 10:00 P.M.	8 AM TO 5 PM 7 PM TO 10 PM
TUESDAY	8:00 A.M. TO 9:30 P.M.	8:00 AM-5 PM 7:00-10 P.M.	8 A.M.-12 P.M. 1 P.M.-5 P.M. 7 P.M.-10 P.M.	8:00 A.M. TO 10:00 P.M.	8 AM TO 5 PM 7 PM TO 10 PM
WEDNESDAY	8:00 A.M. TO 9:30 P.M.	8:00 AM-5 PM 7:00-10 P.M.	8 A.M.-12 P.M. 1 P.M.-5 P.M. 7 P.M.-10 P.M.	8:00 A.M. TO 10:00 P.M.	8 AM TO 5 PM 7 PM TO 10 PM
THURSDAY	8:00 A.M. TO 9:30 P.M.	8:00 AM-5 PM 7:00-10 P.M.	8 A.M.-12 P.M. 1 P.M.-5 P.M. 7 P.M.-10 P.M.	8:00 A.M. TO 10:00 P.M.	8 AM TO 5 PM 7 PM TO 10 PM
FRIDAY	7:30 A.M. TO 11:00 P.M.	8:00 A.M. TO 5:00 P.M.	8 A.M.-12 P.M. 1 P.M.-5 P.M.	8:00 P.M. TO 5:00 P.M.	8:00 A.M. TO 5:00 P.M.
SATURDAY	9:00 A.M. TO 9:00 P.M.	9:00 A.M. TO NOON	9:00 P.M. TO 12:00 P.M.	1:00 P.M. TO 5:00 P.M.	9:00 A.M. TO 12:00 P.M.
SUNDAY	NOON TO MIDNIGHT	2:00 P.M. TO 5:00 P.M.	2:00 P.M. TO 5:00 P.M.	1:00 P.M. TO 10:00 P.M.	CLOSED
WEEKLY TOTAL HOURS	105	63	58	78	50

Figure 1

Health Sciences, Veterinary Medicine and Law are also open a large number of hours but mostly serve graduate programs.

In addition to reference desk service, students are regularly referred to appropriate subject librarians at Ellis (science, art, archeology, music, geography, history, philosophy, business, political science and other social sciences, education, psychology, and language and literature) and subject librarians at the branches.

The reference department also provides special services to disabled students. Among the services provided are retrieval of materials from the stacks, special equipment and study rooms to allow utilization of those materials and special facilities which allow exam taking in the library.

Assessment

Data is regularly gathered from a number of sources in order to monitor reference service. Patrons can and do make comments about service (both positive and negative) in the library suggestion box in the front lobby of Ellis. Reference staff not only answers these comments but makes changes in service if necessary. Reference supervisors regularly evaluate reference service staff and correct problems as they occur. In addition, reference statistics are examined each month and if there are significant increases and decreases, steps are taken to modify service accordingly. Reference staff continually update reference sources and try to find books that will answer difficult or frequently asked reference questions. Search guides and handouts are regularly revised and new ones created depending on demand for information in a particular area.

It is generally felt by library staff, due mostly to positive feedback by regular patrons and the high volume of reference questions handled each year, that service offered undergraduates is successfully geared to meet their needs. Adequate staffing levels must be maintained in the future to insure that librarians stationed at the Reference Desk are able to spend time with undergraduates showing them how to use the sophisticated tools located in the library.

A recent phenomena which has interfered with service to MU undergraduates is increased library use by non-MU students. Non affiliated students from the nearby schools often come to the library to use heavily used periodical indexes, INFOTRAC (only 4 search stations), or business CD-ROM's (1 search station) at the same time they are needed by MU undergraduates. Like MU undergraduates, these students need reference assistance to adequately utilize sophisticated technology. The library needs to make service to MU undergraduates a priority and develop a policy that addresses the problem of non-university patrons.

Recommendation 1.

Obtain undergraduate input on how to publicize and improve reference service. Undergraduate input is also needed to determine which hours service should be offered and how to improve arrangement of reference sources.

Recommendation 2.

Insure that adequate staffing levels are maintained at the Reference Desk so that reference staff can spend time helping undergraduates with reference needs. Institute continuing education for all public service staff to make them more aware of the wide range of services offered by the Libraries, and improve their reference techniques and knowledge of sources. Employ objective measures to evaluate reference service and staff in order to help improve service to undergraduates.

Recommendation 3.

Develop a policy giving MU students priority over non-university patrons when both need heavily used resources such as INFOTRAC and other CD-ROMS.

2. Computerized Reference Service

Description

Computerized reference services available to undergraduate students at the University of Missouri-Columbia fall into two broad categories: fee-based online systems and free in-house systems. Fee-based online systems, as exemplified by LITQUEST and LITQUEST/AFTER DARK, offer dial-up access to over

500 databases encompassing a wide range of disciplines. Reference librarians or search analysts assist students in selecting appropriate databases, executing online searches and in instructing patrons who opt to do their own searching through LITQUEST/AFTER DARK.

Fees are generally based on online connect time and citation charges. Undergraduates are eligible for a 25% discount on all LITQUEST daytime searches. Students using the AFTER/DARK service are charged according to a preset, discounted price structure.

Free in-house systems which are microcomputer-based and intended for end-user searching are primarily composed of INFOTRAC and a growing number of compact disk databases (CD-ROMS). At the present time, Ellis has 4 subject oriented CD-ROM indexes: Agricola (agriculture), ABI INFORM (business), ERIC (education), and PsycLIT (psychology). These offer students most of the advantages of online systems without the costs.

In addition to the specialized subject CD-ROMS, Ellis has access to 4 search stations of INFOTRAC which at the present time is the system of choice for the majority of undergraduates. INFOTRAC indexes over 900 business, technical, scientific and general periodicals and newspapers. A recent Ellis survey (November 1988) of 73 undergraduate users of INFOTRAC indicates that students routinely rely on this database for assistance in writing term papers and other class assignments. There is sufficient evidence to suggest that the rate of usage is steadily increasing. Many students, however, need to use a more specialized CD-ROM after their initial search on INFOTRAC. At the present time, many of the CD-ROM indexes appropriate for undergraduate research are not owned by the libraries.

Assessment

An analysis of the literature in the field of computerized reference services reveals that the University of Missouri--Columbia compares favorably with sister institutions. The Libraries' continuing investment in CD-ROM technology and applications is certainly in step with the national trend. With the acquisition of CD-ROM end user systems, MU like other academic libraries, has experienced a decrease in the use of its fee-based services. Patrons often stop their search for information once they have used the free CD-ROM systems and are unaware that they can have dial access to hundreds of additional databases not available yet on CD-ROM. Other factors effecting the decline in the fee based searching may involve lack of publicity or inadequate funding of services.

Presently, as indicated by the survey discussed earlier, undergraduate students are impressed with the performance of INFOTRAC. In fact, the overwhelming majority of responses (88%) rated the system as very good to excellent in meeting their information needs. INFOTRAC's transparent design allows even novice users to search effectively with little training. The most common complaint regarding the system is the lack of terminals, especially during peak periods. With only three stations in operation during the survey,

many students expressed frustration with having to wait up to thirty minutes for a vacancy. Also the lack of social science and humanities CD-ROMs has limited undergraduate use of end-user systems except for INFOTRAC. More subject oriented CD-ROMs are needed in the future to meet undergraduate needs. Wilson offers a CD-ROM version of both Humanities and Social Sciences Index for about \$1200 each. If these were available to undergraduates, their access and use of more scholarly journals would be greatly improved. An added bonus to getting the Wilson CD-ROMs is that the library owns a large percentage of the journals indexed in these sources. Network technology also exists to allow more effective use CD-ROM disks on existing work stations.

Recommendation 4.

- a. Install at least 2 more INFOTRAC terminals. Buy and install additional CD-ROM indexes appropriate for undergraduate use to improve their access to more scholarly journals in class assignments and papers.
- b. Investigate use of networking technology to allow CD-ROM work stations to access multiple disks, thus eliminating purchase of additional terminals every time new disks are acquired. (See Recommendation 37 in the Facilities Subcommittee Report.)
- c. Investigate more aggressive methods of publicizing Litquest and Litquest/After Dark to insure access to databases not available in the library on CD-ROM. For example: Create and disperse customized bibliographies on popular topics emphasizing particular online database, provide online demonstrations as part of bibliographic instruction programs and library skills classes, encourage TA's and faculty to publicize online sources in the classroom, form a task force to study the possibility of reducing the price structure for online searching.

II. Undergraduate Instruction

This report describes the present Bibliographic Instruction Program, including statistics about the number of undergraduates participating in the program, when available, and makes recommendations to further strengthen the program. Recommendations are based on the results of the following surveys which established a standard for comparison and a source of new ideas:

- 1) Survey of Big-8 Bibliographic Instruction Coordinators
- 2) Survey of Ellis Reference Librarians
- 3) Survey of selected MU faculty
- 4) Survey of recent literature on bibliographic instruction

The subcommittee concluded that the Bibliographic Instruction Program at MU Libraries offers a wide variety of services to undergraduates and that the program has a number of strengths. Although separate statistics are not available for undergraduates, 5,556 students, or 24% of all students enrolled at MU, took part in some aspect of formal library instruction at Ellis Library

in 1987/88. Assuming that undergraduates accounted for a large percentage of the 23,000 students enrolled, one can conclude that at least one-fourth of the undergraduate population was involved last in some form of library instruction or orientation last year.

Program Description

Formal library instruction is an important academic goal of MU Libraries. The goal of the Bibliographic Instruction Program is to ensure that undergraduates learn to use the library to meet their academic needs and to satisfy lifelong learning. The present Bibliographic Instruction Program consists of the following elements:

- 1) Library orientation
- 2) Course-related instruction
- 3) Individualized instruction
- 4) Workshops and seminars
- 5) Library Skills Course

The Library Orientation component of the Bibliographic Instruction Program consists of the following:

- * General orientation tours offered at the beginning of each semester
- * Class tours during the semester as requested by faculty
- * Computer-assisted instruction program (under development)
- * Orientation slide-tape program (under development)
- * Self-guided "walking tour" (being revised)
- * Library orientation insert in the Maneater
- * Fall & Winter orientation series
- * Summer & Winter Welcome
- * New student orientation sponsored by dorms

During the period 1986-1988, 211 tours were given to 2094 students. Although separate statistics were not gathered for undergraduates, it is estimated that more than 80% of the students taking tours were undergraduates.

The Course-related instruction component of the Bibliographic Instruction Program has two goals: 1) to inform large introductory classes about general bibliographic tools and to introduce a research strategy applicable to a wide variety of research activities; 2) to focus on the research needs of undergraduates from the perspective of a specific field or discipline or on a specific library assignment. At present this component consists of classroom lectures, often with the use of audio-visual aids, and a library tour when requested.

Since 1986, 356 course-related instruction sessions have been given to undergraduates, resulting in an average of 3340 undergraduates who receive instruction annually through course-related instruction. This does not include undergraduates enrolled in the Library Skills course.

The Individualized Instruction component of the Bibliographic Instruction Program consists primarily of the Term Paper Assistance Program (TAP). In the fall of 1985, the first semester the program was offered, 105 students used TAP. Exact statistics for undergraduates for remaining semesters are not available but it has become obvious that the number of students using TAP has declined recently. TAPS needs to be reviewed before it is offered again.

Library staff have offered Workshops and seminars as part of the Bibliographic Instruction Program, although separate statistics for undergraduates attending these activities are not available. The majority of these workshops have been geared to faculty and graduate students and have offered detailed instruction in the use of sophisticated searching techniques for computer files. Attendance by undergraduates has been minimal in recent years.

The Library Skills Course is a one-credit course (Library Science 105) offered to undergraduates with the goal of providing a basic introduction to the Library and its resources. This one-semester course has a dramatic growth in enrollment since 1979 when 93 students were enrolled in 9 sections. Its popularity has grown so that by first semester of 1988, approximately 800 students were enrolled in 26 sections.

GENERAL RECOMMENDATIONS

Different components of the Bibliographic Instruction Program have been added over a period of years and the subcommittee felt that a comprehensive evaluation of the entire program is needed in order to utilize limited resources as wisely as possible. In addition, strong evidence exists that active, rather than passive learning, is the key to success of any bibliographic instruction program.

Recommendation 5.

Establish a Committee on Bibliographic Instruction to work with the Bibliographic Instruction Coordinator. Together they should develop a comprehensive plan for bibliographic instruction in MU Libraries which includes goals, objectives, a policy statement, a plan for implementation, and evaluation of resources required to implement the proposed plan. Adopt a philosophy of teaching that emphasizes active rather than passive learning through the use of workbooks rather than lectures to make students familiar with library resources. Communicate with the librarians, faculty and university administrators regarding the benefits of integrating library instruction into the academic curriculum.

Recommendation 6.

The Committee on Bibliographic Instruction should evaluate the entire BI program. The Subcommittee recommends developing a library component to the Freshman Experience Course. Library

tours should be evaluated and upperclass students and library wide staff should participate in conducting them. Evaluate term paper assistance, workshops, seminars and Library Skills and develop self-directed exercises for course-related instruction.

Recommendation 7.

Change the reporting structure so that the Bibliographic Instruction Coordinator reports directly to the Head of Reference in order to give more emphasis and support to the program. Reassign an existing reference position to assist the BI Coordinator.

III. Access to the Collections

1. Building Access

Description and Assessment

Undergraduates are welcome to use the collections at all campus libraries; they are not, however, always welcome to use the reader tables. The three branches affiliated with professional schools have some limits on undergraduates' use of their facilities during evenings and/or weekends. In order to assure study space for their primary clientele, the Health Sciences and Law libraries restrict undergraduates' entrance unless they need to consult materials in their collections. The situation differs in the Veterinary Medical Library; while undergraduates are always welcome, access to the collection in the evening is difficult since most of the building's doors are locked. The restrictions on building access in those three facilities make it more difficult for undergraduates to find study space at night.

Recommendation 8.

Remove the restrictions on undergraduates' evening use of the Health Sciences and Law Library. Explore easier building access to the Veterinary Medical Library at night.

2. General Circulation Policies.

Description and Assessment

Undergraduates may borrow books from all campus libraries for the period of one month. Renewals are unlimited, although patrons presently are required

to bring the volumes to a circulation desk to process these transactions. The new online system makes telephone or mail renewals a possibility. However, the steps needed to handle phone requests are cumbersome and prone to error, so mail-in renewals are a better option. If the use of these is adopted, it may be a good idea to institute a limit (such as three) on the number of times a volume can be renewed.

Journal loan periods for undergraduates vary in length from two hours to one day in different branches. Other types of materials, such as those in the vertical file and Recorded Sound collections, are also available for loan to students. While in most areas the MU Libraries' policies are fairly typical, the one that is unusual allows undergraduates to borrow bound journals. Normally these are non-circulating to that patron group, both since the population is so large and those materials are in such heavy demand. While it would appear to be a reduction in their privileges, changing Ellis Library's policy so that undergraduates could not take journals home overnight would increase their chances of finding them in the building. If this change were combined with an increase in shelving staff so that volumes could be handled more promptly, patrons' access to the collection could be improved dramatically.

Books kept overdue by students accrue fines at the rate of \$.25 per day. There is a grace period during which an overdue notice is mailed to the borrower; if s/he acts promptly to return or renew the materials, no fine is charged. If the overdue notice is ignored, however, the student receives a bill for the replacement price of the materials, plus a \$5.00 fine and \$5.00 service charge per item. While these rates used to be consistent with those of other academic libraries, they are now lower than at most schools. These prices have been in effect since the early 1970's, no longer have the same persuasive impact on students as they did initially, and probably should be increased. The daily accrual of \$.25 could remain the same, but the maximum accumulation of \$5.00 could be raised to \$10.00, and the service charge similarly increased.

Recommendation 9.

Institute a trial program of mail renewals for faculty and staff, with the possibility of later extending the service to students. Limit the number of times an item can be renewed to three. Change Ellis Library's circulation policy so that bound journals cannot be checked out by undergraduates in order to increase availability.

Recommendation 10.

Increase shelving staff so that materials can be handled more promptly. (See Recommendations 16 and 27).

Recommendation 11.

Raise the maximum fine amount from \$5.00 to \$10.00. Raise the billing service charge from \$5.00 to \$10.00. Consider refunding only half (\$5.00) upon a student's return of an item; continue to cancel full amount for faculty/staff.

3. Reserve Policies.

Description and Assessment

Most reserve materials circulate for two hours to all library patrons; a few can be borrowed for one or three days. The length of the loan period is selected by the faculty member who puts the books or articles on reserve. Ellis Library policy allows patrons to borrow only two items at a time, and restricts renewals during periods of heavy use. Such regulations are standard in most large reserve operations, and are designed to provide maximum access to the materials.

The new LUMIN reserve system will have an interesting feature that allows patrons to place "reservations" on these books and articles. It allows a library patron to telephone and request that a reserve item be "held" at a certain time for his/her use. While such a service offers a tremendous convenience for the person placing the reservation, it also inevitably restricts the item's access to other borrowers, so adoption of this feature is somewhat problematic. The pros and cons should be carefully considered before a recommendation be made to implement a "reservation" service.

Fines for reserve materials are substantially higher than those for general stack items. After an initial grace period, a patron is charged \$1.00 per hour (during the library's open times) on two-hour loans, with a maximum accumulation of \$10.00. That amount should be considered for an increase to \$15.00, since the charge does not always provide an effective deterrent to late return of materials. While the fines may seem high, they are necessary to guarantee other students' access to required readings.

Recommendation 12.

Form a task force to consider the pros and cons of a "reservation" service for reserve materials. Increase the maximum fine on reserve items from \$10.00 to \$15.00. Put a hold on a student's borrowing privileges when a two-hour reserve item is kept more than 24 hours overdue.

4. Interlibrary Loan.

Description and Assessment

The same interlibrary loan privileges apply to undergraduates as to the rest of the university community. The only restrictive aspect of the library's policy is the requirement that materials requested on interlibrary loan be intended to support either research or course-related work, and not be simply avocational in nature; for that type of request, patrons are referred to the public library. This requirement is intended to ensure that the

resources of the MU libraries are devoted to instructional or research, rather than recreational, purposes. An exception to that policy does exist, however; if a patron requests an avocational item that is listed in LUMIN as being owned by one of the other UM campuses, Interlibrary Loan will honor those requests.

The restriction on recreational borrowing probably inconveniences undergraduates at times. A more significant problem is that the process of interlibrary loan is fraught with delays. While the research needs of faculty and graduate students often span terms, undergraduates typically wish to borrow materials relating to a specific assignment for a course in which they are currently enrolled. Since it frequently takes a month or more for a requested item to arrive, the system is generally too slow to be of real use to undergraduates. Additional staff in Interlibrary Loan could lessen the time it takes a request to leave Ellis, but would not address delays at the other school or those of the delivery process.

Recommendation 13.

Form a task force to study the process of placing interlibrary borrowing requests to identify options for hastening the service including the handling of requests "on the spot."

5. Reciprocal Borrowing Arrangements.

Description and Assessment

Undergraduates are eligible for borrowing privileges at area colleges and universities and also at all publicly-supported schools in the state. The local program is known as MMACU, and includes Columbia College, Lincoln, Stephens, and Westminster/William Woods. The statewide program is called MIX, and includes Central Missouri State University, Harris-Stowe State College, Lincoln, Missouri Southern State College, Missouri Western State College, Northeast Missouri State University, Northwest Missouri State University, Southeast Missouri State University, Southwest Missouri State University, and the four University of Missouri campuses. Between these two programs, MU undergraduates may obtain borrowing privileges at 15 other institutions in the state.

A University of Missouri ID card is all that is required to check out books at the Kansas City, Rolla, and St. Louis campuses. The arrangements with the other 12 schools, however, require a student to first stop at Ellis to obtain an MMACU form or a MIX card before visiting the other library. Not all undergraduates are aware of that stipulation, of course, so sometimes neglect that step and are denied borrowing privileges.

No formal programs exist which guarantee MU students access to other private colleges in the state (such as Central Methodist in Fayette), although borrowing privileges can often be arranged on a case-by-case basis. It is much more difficult for an undergraduate to obtain borrowing privileges at an

out-of-state library, however. While academic institutions frequently will allow faculty from out-of-state schools to use their collections, it is rare for an undergraduate to be granted more than building access.

RECOMMENDATION 13 Continued

Publicize the availability of existing reciprocal borrowing arrangements to undergraduates. Explore the possibility of adding private colleges in Missouri to the MIX program.

IV. LUMIN

Description

LUMIN (Libraries of the University of Missouri Information Network) is the acronym for the library's online card catalog. LUMIN includes volumes held at the MU campus and its branches, as well as the holdings of the other University of Missouri campuses.

Beginning in 1985, all new acquisitions were added only to LUMIN and not to the card catalog, therefore LUMIN is the only tool available for locating new items. Earlier materials found only in the card catalog are constantly being added to LUMIN in the libraries retrospective conversion efforts. All serials and all branch materials have already been added. LUMIN keyword title and Boolean searching allow new ways of searching the collections. Undergraduates, as well as other library patrons, depend more and more on LUMIN as the primary access to the collection. Increasingly, without access to LUMIN, information about to the libraries collections is limited.

LUMIN can be accessed by 45 dedicated terminals located in the libraries, 800+ non-dedicated terminals located in Campus Computing sites and by dial-up searching throughout the state. LUMIN provides patrons access to the collections at other UM campuses, making them more aware of the possibility of borrowing those items through interlibrary loan.

The subcommittee made a study of LUMIN access, using selected questions from Kurt Kopp's LUMIN User's Survey (Spring 1988), Information Desk Statistics (1988), Verbatim Comments from Rose Albritton's Library Usage Survey (1988), and the Information Desk Staff Opinion Survey (November 1988).

LUMIN is available 111 hours per week:

Monday - Friday	7:00 a.m. to 12:00 p.m.
Saturday	8:00 a.m. to 11:00 p.m.
Sunday	1:00 a.m. to 12:00 a.m.

The library's 45 dedicated public access LUMIN terminals are located:

Annex I (1)	Journalism Library (1)
Ellis Library (30)	Law Library (2)
Engineering Lib. (3)	Math Library (1)
Geology Library (1)	Veterinary Medical Lib. (1)
J. Otto Lottes Health Sciences Lib. (6)	

800+ non-dedicated terminals which can access LUMIN are available at University Campus Computing sites and the following locations:

Bingham dorm group	Johnston-Wolpers dorm group
Blair dorm group	Middlebush
Brady Commons	Pershing dorm group
Electrical Engineering	Physics
Engineering	Rollins dorm group
General Classroom Bldg.	Stanley Hall
Heinkel Building	University Place
Hill Hall	

Dial-up access is available to any IBM/PC compatible user with a modem and a copy of PROCOMM 2.4.3. Communication assistance for other computer systems such as Apples, is available from the Computing Help Desk.

For the terminals in Ellis Library, staff assistance is available from the Information Desk 71 hours per week and the Reference desk 78 hours per week. The Information/Help Desk, located in the catalog area, is available the following hours:

Monday - Friday	8:00 a.m. to 5:00 p.m.
Monday - Thursday	6:30 p.m. to 9:30 p.m.
Saturday - Sunday	1:00 p.m. to 4:00 p.m.

Hours for the Reference desk are listed on page 2 of this report. For the dedicated terminals in other locations, assistance is available on-site.

Assessment

There is no backup for LUMIN and on those occasions when the system is down, patrons have no access to items acquired since 1985. Because of the shortage of printers, not all patrons using LUMIN have the option to print. The occasional use of a printer is sometimes a necessity as well as a convenience. The physical layout of the 1st Floor LUMIN area in Ellis does not allow enough work space or privacy, and seating is provided only at the handicapped stations. LUMIN is designed to be user friendly but staff assistance is still necessary when patrons need help finding the correct method of searching, keyboards lock, or printers jam. To reduce dependence on staff, LUMIN instructions need to be reworked for clarity. The configuration of terminals and the Information Desk hampers the ability of staff to offer assistance. Special key-caps need to be installed on LUMIN terminal keyboards to facilitate patron use of special keys.

LUMIN

Recommendation 14.

- a. Increase awareness of LUMIN and LUMIN access by better utilization of existing methods and forums (for example dorm newsletters, Maneater, departmental and college publications). Evaluate LUMIN printed handouts, signs, and terminal displays for re-design or updating. Provide LUMIN access information and dialup instructions at the Campus Computing sites.
- b. Improve staff assistance by physical relocating the Information desk and/or the LUMIN terminals so they are physically closer to each other. Re-evaluate the original LUMIN/Card Catalog configuration recommended by the Card catalog/LUMIN Task Force of July, 1982.
- c. Provide a printer and switch for every other terminal and a stool for use at each terminal. Provide more work space between terminals.
- d. Place terminals on other floors within Ellis. (For more detail on locations see Recommendation 34 of the Facilities Subcommittee).
- e. Form a standing LUMIN committee to monitor equipment needs and research replacement equipment.
- f. Increase undergraduate input to the LUMIN Users Committee.

Recommendation 15.

Investigate the possibility of a CD-ROM backup when the LUMIN system is unavailable to provide temporary access to the collections and alleviate patron and staff frustration.

V. Interviews With Undergraduates

Thus far the assessment and evaluation of library services to undergraduates has been done by librarians and other staff who see things from their own point of view. Library personnel assume they are providing the types of services undergraduates need but don't always know what is most helpful, nor do they have a good feedback mechanisms for assessing the quality of the services provided. In order to augment this perspective, two forums were held to get input directly from students. On the spot interviews were conducted at Brady Commons and a library Rap Session was held with participants chosen from the Student Advisory Council.

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Introduction

In June 1988, the Director of Libraries appointed a five person Task Force to evaluate the Libraries' services to undergraduates. The campus as a whole was in the process of renewed commitment to provide the best possible education to undergraduates. This commitment produced a number of undergraduate initiatives including an improved Honors College and renewed commitment to the campus writing program, establishing a "freshman year experience" course, improving undergraduate retention and strengthening graduation requirements, instituting workshops to improve teacher competence, general curriculum review and state mandated assessment of undergraduate programs. While excellent library service to undergraduates had always been a goal, a study focusing on this user group was considered timely in light of the renewed campus commitments.

The Task Force undertook an intensive year-long study of four areas: services, collections, facilities, and cooperation with other academic units. Twenty staff members were recruited to serve on subcommittees which were charged with describing, assessing, and making recommendations in each of these areas. Most of the study focused on service provided by Ellis Library but service provided by branch libraries was included when they served undergraduate programs. The Executive Summary contains the conclusions of those four groups.

During the period covered by the study, a number of recommendations made by the Subcommittees were implemented by the Libraries. The Shelving Room was relocated in the old Staff Lounge (Recommendation 27), two additional full time shelving staff members were hired (Recommendation 27), the oversized collection was consolidated and moved to 4 West (Recommendation 28), professionally produced signs were installed (Recommendation 31), and bound volumes of journals no longer circulate to undergraduates in an effort to make them more available to all (Recommendation 9).

Executive Summary

**Library Services to
Undergraduates**

**University of Missouri-Columbia
Libraries**

**Final Report
July 18, 1989**

Undergraduate Services Committee

Robert Heidlage, Geology Library
Nancy Myers, Social Science Librarian, Ellis Library
Paula Roper, Education Librarian, Ellis Library
Marsha Stevenson, Head, Access Services, Ellis Library
Pat Timberlake, (Chair) Assistant Head, Ellis Reference Services

1. Brady Commons Survey

Description and Assessment

An oral questionnaire was given at random to undergraduates passing through the Brady Commons lobby area on three weekdays in January and February 1989. A total of 121 questionnaires was completed with responses divided between two overall categories. Figure 2 illustrates that 32% of the students reported using the library as a primary work or study location and 68% said they studied elsewhere.

Students Primary Work/Study Location as Reported at Brady Commons

	Number	Percent
Library	39	32%
Other locations	82	68%
TOTAL	121	100%

Figure 2

The sample included responses from 21 Freshmen, 34 Sophomores, 28 Juniors and 38 Seniors. Of the 39 respondents who chose the Libraries as their primary study/work place, the attributes of Quiet (n=29) and Resources Available (n=9) were most often selected. Words most often chosen to describe the Libraries by this group were "Quiet," "Big," and "Helpful," on the positive side and "Confusing" and "Complicated" on the negative side. The group was almost evenly divided (yes=19, no=20) on the question of having problems locating materials in the library. Of those encountering problems, the most frequently listed were in the areas of "items not found on shelf" and "difficulties in using LUMIN".

The 82 respondents who listed "Other" locations (typically home or dorm) as their main study/work place overwhelmingly reported "Convenience" (n=34), "Quiet" (n=26), and "Ability to eat/drink/smoke" (n=11) as the reasons for their choice. Nearly all of the interviewees from this group reported that they did come to the libraries when it was necessary to use special materials such as reference tools and Reserve readings, as well as to check out materials to be used at home. Those who indicated problems in finding books most often named "library layout", "items not found on shelf", and "difficulties with using LUMIN" as the areas of concern. The suggestions for improvements to make the Libraries more useful were very similar from both groups and included the following:

Recommendation 16.

- a. Shelf books/journals more promptly (see Recommendations 10 and 27).
- b. Extend the hours that the Libraries are open.
- c. Provide better signs, maps and other directional assistance.
- d. Provide a lounge for drinks/smoking/relaxation.
- e. Provide special rooms for activities such as small group and absolute silence study. Provide lounges for taking study breaks. (These would not necessarily allow drinks/smoking but rather provide a more comfortable, informal atmosphere). In planning for the new addition, consider providing an intensive study area with 24 hour access.

Recommendation 17.

Provide more computer access (including INFOTRAC and CD-ROMs). (See Recommendations 4 and 35). Improve the LUMIN system, especially subject searching. Clean up records, make series searches easier, provide more assistance in using LUMIN.

2. Library Rap Session

Description and Assessment

An informal discussion and brainstorming session was held at an out-of-library setting (the Conference room at Middlebush Hall) with participants chosen from the Student Advisory Council, a group composed of presidents and other officers of various campus organizations. The two hour audiotaped session was hosted by two librarians who served as facilitators for the discussion. The Groups represented included members from MSA, the Pan-Hellenic Council, International Students Programming Board, the Student Foundation, Engineering Student Council, Black Business Students Association and the Forestry, Fisheries and Wildlife student organization thus providing a diversity of programs, experience and opinion. Students were encouraged to speak freely about what they liked and didn't like about the Libraries, identifying problems and offering solutions.

A prepared discussion guide outlined some of the key issues to be explored such as:

What do students know about library services?
How did they learn of the services?
Do they use the services? Why or why not?
How would they rate the quality of interaction with staff?
Do students feel comfortable using the libraries?
What about LUMIN and other computer technology?

The questions were used merely as a guide. The discussion took off spontaneously and followed its own course, in keeping with the purpose of such a rap group. In general, the comments were very favorable for the library. The exception was reaction to and overall dissatisfaction with LUMIN, which was overwhelmingly viewed as confusing and difficult to use.

Suggestions for improvements can be grouped into four main categories:

Recommendation 18.

Improve communications about what the Libraries have to offer (TAPS, tours, resources & collection, workshops, etc.) by working through student groups with information and publicity. Consider training students to be "Library Ambassadors" to give tours, to serve as resource persons (especially for international students), and other tasks. (See also Recommendation 6). Send out very basic information about library services for posting in dorms, student group offices, etc. Publicize services in the Maneater. Consider having a marketing or journalism student design a library publicity program as a senior project.

Recommendation 19.

Devise a condensed version of Library Skills that could be taught in a few sessions rather than over a semester. Develop topical or special focus classes (e.g. How to do a research paper in ____). Offer evening sessions and discounts on books at the bookstores for those completing the mini-courses. Offer sessions devoted solely to using computer tools such as LUMIN and CD-ROMs.

Recommendation 20.

Consider forming an Undergraduate Library Committee as a forum for ongoing exchange of ideas between the Libraries and students. (See Recommendation 1 which recommends more undergraduate input).

Collections

Library Service to Undergraduates Collections Subcommittee

Collections Subcommittee members:

Dixie Fingerson
Bonnie MacEwan
Jan Rice
Marsha Stevenson
John Wesselmann

To provide quality service to undergraduates the Libraries must have collections which adequately address students' needs for course-related materials. These items should be readily accessible, physically maintained, and continually enhanced by new acquisitions. The Collections Subcommittee undertook the task of describing the Libraries' current position vis-a-vis these goals by providing an assessment of the collection's strengths and weaknesses and by developing a realistic set of recommendations for improvements.

The work of the Collections Subcommittee focused on two major issues: accessibility and collection development. Issues of accessibility were examined through a book availability study and an assessment of the features of the new circulation system which provides information about the use of materials. Collection development concerns included the Libraries' policies on purchasing duplicate copies of heavily-used items and textbooks; evaluating the Libraries' collection based on ownership of a "core" list of titles appropriate for an undergraduate collection; and development of a model for an undergraduate book fund allocation formula. Two related issues were considered: the role of the Libraries in supporting recreational reading and the preservation and conservation of the undergraduate collections.

I. Accessibility

The Subcommittee designed and conducted a Book Availability study to determine how successful undergraduates were when given the task of locating core undergraduate titles in the Libraries. The Subcommittee recognized that the students in MU's Library Skills class represented an easily identifiable group of novice library users to take part in the Availability study. The purpose of the study was twofold: first, to determine whether undergraduate students were able to locate a known item in the Libraries; and second, to determine if the Libraries own the materials undergraduates should reasonably expect to find in a collection of this size.

On the first day of fall classes, each student enrolled in the Library Skills course (a total of 765) was given two flow chart worksheets, each with an author and title listed. They were to determine if the Libraries owned the

materials and, if owned in Ellis, go to the stacks to find the volumes. The titles were selected from the past three years of "Outstanding Academic Books" from Choice.¹ The students were told that the "assignment" was due the following week so the students, for the most part, had not benefited from formal library instruction. Five class points were given to each student who returned the forms. Written instructions were prepared for the T.A.s who taught the classes. They were asked to distribute the worksheets and to imply to the students that this was a regular assignment. The T.A.s collected the sheets, recorded the five points and gave the flow charts to a member of the Subcommittee. In the case of titles owned but not located, the students were asked to turn in a "look-up" at the Circulation Desk. Access Services staff searched these titles immediately after the students submitted them.

The Subcommittee has a number of concerns about the study and would like to list them before presenting the information found, and before drawing conclusions or making recommendations.

1. The study was conducted at the beginning of the semester when fewer books are checked out and before shelving becomes seriously backlogged. The success of the students in finding books in the proper locations is not necessarily indicative of the situation later in the semester when it may be more difficult for students to locate materials.
2. Although there were good reasons for selecting Choices's "Outstanding Academic Books" list it is not known if the titles on the list are typical of those required by undergraduates at MU. Some titles were eliminated by the Subcommittee because they were considered to be atypical, but it is not known if the best selection of titles was included.
3. The students were not asked to record shelving range numbers when they searched for books. Had this information been requested it would have been possible to determine if the students were able to find the correct part of the building when they attempted to locate their books. The Subcommittee suspects that a number of students were not able to locate the books because they did not find or did not know how to use the Location Guides to the Libraries. Requesting range numbers would have made it possible to confirm this hypothesis.

Results

The Subcommittee analyzed materials accessibility by answering two general questions: (1) how many of the owned titles could the undergraduates find in Ellis Library and (2) how typical were the look-ups submitted by the students?

¹. The Choice lists were used because the selection criteria for the list includes: "the importance of the work compared with other literature in the field; whether the work is of value to undergraduate students; and whether it is essential in building library collections."

The results of the study revealed that 91% of the titles in the study (1301) were successfully located on LUMIN by the students as shown in Figure 2 below. The discovery that over 90% of the undergraduates could successfully perform an author/title search on LUMIN implies that current LUMIN instruction and user support for this type of search is adequate. (The study did not address subject searches which pose real problems for many LUMIN users). This and other information provided by the study could be used for planning where to direct limited instruction resources. The Subcommittee recommends that the information gathered in the Availability Study be shared with the Instruction Coordinator and other interested Library staff.

Students' Success in Using Online Catalog

N=1301	Number	Percentage
Student Found correct Information IN LUMIN	1188	91.31%
Student Did Not Find Correct Information In LUMIN	113	8.69%
Total	1301	100%

Figure 2

Figure 3 indicates that of the 1018 titles in the sample that MU libraries owned, students found nearly 60% of the books on the shelves in the Ellis stacks. An additional 10% of the students determined that the books were charged out or in reshelving and 8% were located in a branch.

Students' Success in Locating Library-Owned Books on the Shelf

N=1018	Number	Percentage
Book on shelf	608	59.72%
Book in reshelving or checked out	99	9.72%
Book in Branch	79	7.76%
Book not located	232	22.78%
Total	1018	100%

Figure 3

As shown in Figure 4, of the 1301 titles in the study, undergraduates were able to locate the book they sought in Ellis Library 52% of the time. 19% of the time they were able to determine that they would not be able to find the book at MU. In 13% of the cases they would be able to use the book if they went to a branch or placed a call-in through the Circulation Department. In an additional 49 cases students were able to use LUMIN to find a call number but then did not know what to do with it.

Students' Success in Locating Books in the Study

N=1301	Number	Percentage
Book on shelf	608	46.73%
Book in reshelving or checked out	99	7.60%
Book in Branch	79	6.07%
Book not located	265	20.363%
Book not owned	250	19.21%
Total	1301	100%

Figure 4

The Subcommittee further analyzed the look-up requests submitted as part of this assignment, they discovered that of the 40% of the books that students could not locate, accurate information could have been found for one half (20%) of the books with staff assistance. This compares with a figure of only 16% of items in a similar category which had been turned in as look-ups by the general library population in 1987-88. Another quarter of the books students couldn't find during this assignment were located by staff members elsewhere in the building, in areas such as the Shelving Room. All told, 78% of the searched items were readily available in Ellis.

Students Could Have Found Accurate Information With Staff Assistance

N=1301	Percent
Student Found Accurate Information About Books in Study	79.63%
Student Could Have Found Accurate Information with Staff Assistance	20.37%
TOTAL	100%

Figure 5

This suggests that inexperienced library users may frequently be frustrated in searching for materials by their lack of knowledge about how to find books in this building. Formal programs of orientation and instruction can address the problem, but only a small portion of library users take advantage of them. The Subcommittee believes that the most effective way of reaching inexperienced users is by making staff available at all hours to assist patrons in their searches for materials in the collection. Staff could check the call number in LUMIN, verify the location and then go to the stacks with the student and search in the correct location, the shelving areas and then if necessary return to the stacks and look to see if the book is slightly misshelved. The results shown in Figure 5 indicate that an additional 265 (20%) titles would have been located if such assistance had been available.

The Subcommittee recommends that a position be created to provide last resort LUMIN and stack assistance. The staff member would serve a two-fold purpose: providing assistance in locating books and teaching the student how to locate materials in the future.

An issue related to the accessibility of materials is their availability when needed by users. The Library makes books accessible by purchasing them, but when a very large undergraduate population competes for the same items, a single copy may not be sufficient. In 1987-1988 recalls were processed for nearly 5,000 volumes. One of the capabilities of the new circulation system will be "purchase alerts" which can be generated when materials are recalled, and can be used to notify selectors of high interest in particular titles so that they may consider the purchase of a duplicate copy. Sophisticated statistical analysis of actual undergraduate usage of the collection will also be available with the new circulation system.

The Subcommittee recommends that "purchase alerts" be generated by the new circulation system and forwarded to the appropriate selector, and that the use of the new statistics be explored.

II. Collection Development

In order to determine by what method owned titles were purchased, a listing of all titles received on the Approval Plan in the past 5 years was checked against the Choice lists. It was hypothesized that many of the titles owned had been purchased on the Approval Plan rather than from firm order monograph budgets. This hypothesis proved to be false; as shown in Figure 5 below, only 17.98% of the 1018 titles owned were purchased from Approval. This information was further divided into Social Sciences, Science, and Humanities titles.

Acquisition of Books in Sample

	Number	Percent
N=1018		
Books Purchased on Approval	183	17.98%
Humanities	(84)	45.97%
Social	(72)	39.34%
Science	(27)	14.75%
Books Not Purchased on Approval	835	82.02%
Total owned	1018	100%

Figure 6

Historically, selection in the Libraries has been oriented toward meeting the needs of faculty and graduate students. Firm order funds are spent mainly for titles for advanced research rather than undergraduate needs. One of the original hypotheses was that, of the titles owned on the Availability study, more than 50% would have been received on the Approval Plan. Figure 6 illustrates that 82% of the titles in the study were received through firm orders or as gifts rather than through the Approval Plan. Clearly the undergraduate collections were not supported by the Approval Plan. For this reason it is proposed that a portion of each monographic fund be set aside for undergraduate level purchases.

The Collections Subcommittee recommends that Undergraduate book fund allocations be designated, with dollars to be spent specifically on library purchases for undergraduates. Additional monies need not be allocated for this purpose; rather, a formula should be derived which specifies a percentage of each discipline's monies to be spent on undergraduate materials. The Collections Subcommittee derived a model formula to be evaluated by the Collection Development Committee and the Library Administration. It may be possible to request the Approval vendor to develop a separate profile that will identify key undergraduate titles. If so, it may be desirable to transfer these funds to the Approval budget rather than retaining them in the firm order allocations.

Undergraduate book fund allocations based on this formula are listed below. Explanations and justifications follow the table.

Model
Undergraduate Allocation Chart

SUBJECT AREA	1 DEPARTMENT TOTALS	2 PUBLISHED OUTPUT	3 OUTPUT	4 UG FTE	5 PROPOSED UG ALLOC	6 UG ALLOC
SCIENCE DISC	\$29,501.13	\$1,364.33	5.77%	13.32%	9.54%	\$2,533.97
HOME ECON DISC	\$5,193.87		0.00%	3.18%	3.18%	\$148.65
BUS & RLT DISC	\$20,464.15	\$1,529.38	6.47%	13.04%	9.75%	\$1,796.13
SOC SCI DISC	\$18,234.73	\$2,138.60	9.04%	8.44%	8.74%	\$1,434.14
EDUC LIBRARY	\$23,490.22	\$565.64	2.39%	11.41%	11.41%	\$2,412.21
LIBS LIBRARY	\$4,317.61		0.00%	0.22%		
AAM LIBRARY	\$14,723.31	\$2,968.17	12.55%	3.92%	8.24%	\$1,091.45
LANG LIBRARY	\$24,572.37	\$2,998.07	12.68%	14.52%	13.60%	\$3,006.99
GHP LIBRARY	\$19,817.70	\$3,926.22	16.60%	7.88%	12.24%	\$2,183.16
SCI BRANCHES	\$27,793.57	\$1,500.91	6.35%	18.14%	12.24%	\$3,062.07
JOUR BRANCH	\$13,700.87	\$286.02	1.21%	2.50%	1.86%	\$228.76
MED BRANCH	\$47,341.57	\$290.65	1.23%	3.40%	2.31%	\$985.50
VET BRANCH	\$10,976.54		0.00%	0.04%		

Figure 7

*Column 1 represents 88-89 base budget per discipline

*Column 2 represents the Choice annual dollar averages by discipline

*Column 3 reflects column 2 as a percentage of the total Choice average by discipline

*Column 4 represents the percentage of MU undergraduate FTEs per discipline (the figure used in CDC's allocation formula)

*Column 5 represents the Undergraduate allocation by percentage. Figures were derived by adding Column 3 (published output) and Column 4 (undergraduate enrollment) and dividing the figure by 2

*Column 6 is the 1988-89 suggested Undergraduate allocation by discipline in dollars. This amount was calculated by taking the 1988-89 base budget per discipline (Column 1) (minus 10% which is the amount allocated for reference books per discipline) and multiplying that figure by the "Proposed Undergraduate Allocation" (Column 5) is explained above.

- Exceptions to the formula are the following:

- Home Economics disciplines were not addressed as such in the Choice lists; therefore the percentage of Undergraduate FTE (Column 4) is used as the proposed percentage for the Undergraduate allocation (Column 5).

- The Undergraduate allocation for Education funds worked out to be far too low; therefore the percentage of Undergraduate FTE (Column 4) is used as the proposed percentage for the Undergraduate allocation (Column 5).

- We propose that approximately \$5,000 be allocated to the Gen Ref fund and that it be designated to be used for undergraduate reference books. The Choice average supports this figure, and it is approximately what the CDC allocation is. Subject area reference funds will be used to buy graduate and research-level reference materials.

In order to create a model to determine Undergraduate Allocations, the Subcommittee evaluated the Libraries' currently established book funds to determine which disciplines support undergraduate programs. Undergraduate allocations were not included for disciplines supporting largely graduate programs such as Library Science and Veterinary Branch funds. Figure 7 above shows that the remaining book funds were grouped in the subject area column by "discipline" or "library," using Collection Development Committee terminology. (Generally this column represents individual selectors; exceptions include: the Science funds (shared by two selectors) and special allocations which will need to be made for theatre, communications, black studies and women's studies.) The Subcommittee used annual Choice lists of "Outstanding Academic Books and Nonprint Materials" for 1984-85, 1985-86 and 1987 as a basis for calculations for allocations in the formula. Materials prices from each list

were added to determine the total expenditure per MU-defined discipline; these were then averaged over the three years.

In addition to the Undergraduate Allocations recommended in Column 6, the Subcommittee proposes that approximately \$5,000 be allocated to the Gen Ref fund and that it be designated for purchase of undergraduate reference books. The Choice average supports this figure, and the amount recommended by the Subcommittee is approximately the same amount currently allocated by the Collection Development Committee. Subject area reference funds will be used to buy graduate and research-level reference materials.

One question the Collections Subcommittee discussed throughout its work was methods of identifying important or core undergraduate titles. In order to evaluate the Libraries' undergraduate collections it is necessary to first identify which titles belong in a library with a good undergraduate collection. One method was to use Choice's "Outstanding Academic Books" list used as a basis for the Availability Study detailed above. The Subcommittee discovered (as shown in Figure 8 below) that the Libraries did not own 280 (21%) out of 1301 titles checked.

UMC Ownership of Books in Sample

N=1302	Number	Percent
Book Owned By UMC	1021	78.5%
Book missing from collection	(3)	
Book Not Owned By UMC	280	21.5%
Total	1301	100%

Figure 8

Although this information is useful, the Subcommittee also looked for a more comprehensive list of undergraduate books. Books for College Libraries has just released the third edition (BCL3), which presents in six volumes a recommended core collection for undergraduate libraries.

At the recommendation of the Subcommittee, a computer tape of BCL3 was purchased and will be checked against LUMIN records. This will enable the Library to obtain extensive and detailed information about its undergraduate holdings. A list will be compiled of all the titles not owned, and statistical information about these titles will be available.

The Library Systems Office has been asked to create a program that will provide:

1. The number of titles found on LUMIN and the number of titles not found on LUMIN.

2. A printout of all the titles MU does not own sorted by call number to determine where the collection may need strengthening and to give selectors lists of titles to review for purchase. Another list will be produced sorted alphabetically by title to prepare a list and possibly a cost estimate of core titles not owned. A third list in order by date will facilitate the identification of titles which are too old to be found on LUMIN.
3. A printout of all the titles MU owns sorted by call number.
4. A printout of all the titles MU owns in BCL3 order to allow the easy annotation of the new volumes of BCL3.

Since the tape will not be available before this Subcommittee has completed its work, it is recommended that this project be referred to the Collection Development Committee for action and that the Collection Development Committee consider preparing a one-time-only purchase request to acquire all of the titles in BCL3 which are not owned, but are still available. Such a request might appeal to a donor, a granting agency, or even to a legislator concerned with undergraduate education.

The purchase of books intended to appeal solely to undergraduates' recreational interests can be controversial in a research library with an inadequate acquisitions budget. The Subcommittee decided to examine the extent to which usual collection development practices seem to be serving avocational needs. Professional literature addressing this subject is sparse, so various lists of recreational reading were collected from general sources and then checked against MU holdings. Over 50% of the materials were found to be owned by the Libraries. Thus, the Subcommittee concludes that, given limited financial resources, popular literature is adequately represented in the collection.

Recommendation 21.

Provide last resort LUMIN and stack assistance. This service would be two-fold: provide assistance in locating books and teach students how to locate materials in the future.

Recommendation 22.

Share the information gathered in the Availability Study with the Instruction Coordinator and other interested Library staff. In particular, the discovery that over 90% of the undergraduates could successfully conduct LUMIN author/title searches implies that current LUMIN instruction and user support for this function is adequate. This and other information provided by the study could be useful in directing limited instructional resources towards other types of LUMIN searches.

Recommendation 23.

Generate "purchase alerts" from the new circulation system and forward them to the appropriate selector. Explore the new usage statistics.

Recommendation 24.

Designate Undergraduate book fund allocations with dollars to be spent specifically on library purchases for undergraduates. A formula should be used to specify a percentage of each discipline's monies to be spent on undergraduate materials. The Collections Subcommittee has derived a model formula to be evaluated by the Collection Development Committee and the Library Administration. It may be possible to request the Approval vendor to develop a separate profile that will identify key undergraduate titles. If so, it may be desirable to transfer these funds to the Approval budget rather than retaining them in the firm order allocations.

Recommendation 25.

Since the Books for College Libraries tape will not be available before this Subcommittee has completed its work, refer this project to the Collection Development Committee for their information and action. The Collection Development Committee should consider preparing a one-time-only purchase request to acquire all of the titles in BCL3 which are not owned, but are still available.

Recommendation 26.

The Preservation Librarian should examine the undergraduate collections and make assessments and recommendations about the condition of the collections.

Facilities

Library Services to Undergraduates Facilities Subcommittee

Facilities Subcommittee Members:

Janice Dysart
Robert Heidlage, Chair
Mary Ryan
Marsha Stevenson
Alan Yount

This Subcommittee was charged with describing and assessing the strengths and weaknesses of Library facilities, and making recommendations to improve library service to undergraduates. "Facilities" as used in this report, refers to objects and other physical structures of the libraries, and not to the staff or their activities.

The Subcommittee believes important improvements in Library facilities have been made in the past decade, but much remains to be done. Libraries are the major providers of scholarly information to instructional departments and programs of the University and therefore need to be organized with clarity and simplicity for efficient use by students and faculty. Adequate investment and proper attention to physical organization are essential means to these ends.

The report is organized according to the following sections: Physical Arrangement, Shelving and Reshelving; Study Space; Bibliographic Instruction Facilities; Signage; Branch Libraries; Audio-Visual Facilities; Computers, Equipment and Labs; and Recorded Sound Facilities.

I. Physical Layout, Shelving and Re-shelving

Description and Assessment

Stack space for the general collection in Ellis is distributed over eleven areas: three floors in the east wing, two in the central tier, six in the west tier. The effects of various additions to the building are evident by mismatched floor levels and obscure entrances to some of the areas. Elevator access for both people and book trucks is spotty, and there is no perfectly smooth and logical traffic pattern which links all stack space.

Subject area Libraries existed prior to 1988, and the distribution of call numbers on each floor still reflects the subject arrangement. Now that the staff and reference collections are centralized, it seems sensible to put the general stack materials into two clear sequences: A-Z for Library of Congress, and 0-9 for Dewey. While this is a simple concept, the labyrinthine nature of the building presents a formidable obstacle in any attempt to devise a scheme that will be transparent to patrons. A number of plans have been

developed and rejected; the one recently approved by the Ellis Managers and the Director of Libraries distributes the collection in the following fashion:

4 East A-C		4 West 001-199
		3 West 200-799
3 East D - JH	3 Central JS-LB1499	2A West LB1500
2 East N - QH	2 Central QK - QZ	2 West R-SO
		1A West SF-T
		1 West U-Z

A - C	4 East
D - JH	3 East
JS - LB1499	3 Central
LB1500 - M	2A West
N - QH	2 East
QK - QZ	2 Central
R - SO	2 West
SF - T	1A West
U - Z	1 West
001 - 199	4 West
200 - 799	3 West

Figure 8

Three main issues regarding oversized volumes in Ellis must be addressed. The first problem mirrors the collection as a whole, in that the call numbers of oversized materials are illogically distributed in a variety of different areas of the building. Rearrangement into an A-Z and 0-9 sequence is strongly encouraged.

The second issue relates to the physical conditions in which oversized materials are housed. Ellis owns very little shelving that is specifically designed to accommodate large volumes, and the cost of purchasing enough to handle the entire oversized collection is prohibitive. It is possible to use standard shelving for satisfactory storage of oversized volumes if both the front and back sides of a section are employed (called "shelving through").

The Ellis Managers developed standard criteria which determined which materials will be kept in the regular stacks (up to 39 cm. tall), stored upright but shelved through (40-49 cm., and called LARGE), placed flat and shelved through (50-64 cm., and called XLARGE), or sent to Special Collections (above 64 cm. tall).

The final problem is where should this collection be located within Ellis. Oversized materials are presently scattered throughout six areas, and are very difficult for patrons to locate. For general visibility and directional purposes, it seems advisable to gather them into a single location. The Ellis Managers considered a number of alternatives, and the one recommended in the present scheme is the fourth floor of the west tier stacks.

Ellis has a centralized Shelving Room (304) on the third floor of the building. All volumes returned from Circulation are first taken to this room and sorted onto sections by major classification groups. Later, they are loaded on book trucks in exact call number order and taken to the stacks to be reshelved.

In addition to the Shelving Room, each stack floor or area has at least one group of designated sections called "Reshelving." There are 21 "reshelving" locations in the building, and they function as temporary holding locations for volumes awaiting to be reshelved on that floor. Materials which patrons consult in study areas of the building are collected by staff on morning "pickups" and taken to the appropriate Reshelving area. In addition to those volumes, bound journals are delivered from the Shelving Room to Reshelving each afternoon. Periodically, staff clear these areas by actually reshelving them where they belong in the stacks.

A major problem in the Shelving Department is the limited space in Room 304. The area is very small, and must accommodate staff office space as well as returned books. The 32 sections of shelving in Room 304 are far too few to handle the quantity of returned materials at the end of each semester, leading to the unsatisfactory practice of stacking volumes on the floor. To address this problem, the Shelving operation plans to move to the east wing of the fourth floor in January 1989. The present Staff Lounge will be converted to a Shelving Room, and since it can hold up to 72 sections, capacity will be more than doubled. The staff office area will be moved to the nearby Room 4E61. This arrangement will provide some security for staff desks and equipment, but will also maintain continual access to in-process materials for patrons.

The 21 designated Reshelving areas are located in out-of-sequence, supposedly highly visible spots, but can still present problems for patrons searching for off-the-shelf materials. Toward the end of each term when in-house use of journals is very high, the Reshelving areas not only fill up, but frequently overflow to the floor. The major problem with Reshelving is its existence at all, since sufficient help should be employed in the Shelving Department to enable staff to return bound journals and materials consulted in-house to their proper places in the stacks right away, without having to resort to the use of temporary holding areas.

Physical Layout, Shelving and Re-Shelving:

Recommendation 27.

Convert the present Staff Lounge into a Shelving Room and 4E61 into an office for shelving staff. (Note: this recommendation was completed Winter Semester 1989). Hire additional Shelving Department staff to expedite books being returned to their place in the stacks and eliminate the need for Reshelving areas on various floors. (Note: two additional full time staff members were hired in Winter 1989, but additional staff is still needed to eliminate the reshelving areas in the stacks. See Recommendations 10 and 16).

Recommendation 28.

Rearrange the entire circulating book collection in Ellis into one logical sequence of A-Z for Library of Congress and 0-999 for Dewey materials. Establish a general traffic pattern within the building from top to bottom and east to west. Arrange the oversized materials into an A-Z and 0-9 sequence using standard sized shelving in order to provide more suitable housing for oversized materials and make them easier for patrons to locate. Move the entire oversized collection to the 4th Floor West stacks. (Note: this Recommendation was completed in Summer 1989).

II. Study Space

Description and Assessment

Following is an inventory of study space in the MU Library system available to undergraduates. The counts were made in October 1988.

ELLIS Library

1 WEST STACKS (21)

21 Single carrels

1A WEST STACKS (3)

3 Single carrels

2 WEST STACKS (1)

1 Single carrel

2A WEST STACKS (3)

3 Single carrels

(1 Single carrel could be added at southwest end)

3 WEST STACKS (1)

1 Single carrel

4 WEST STACKS (0)

0 There is no study space on 4 west

ROOM 406 (32)

8 Four person tables

ROOM 202 (224)

8 Double carrels

28 Eight person tables

ROOM 201 (226)

2 Single carrels

40 Double carrels

26 Four person tables

4 Six person index tables

2 Eight person tables

OLD CATALOG AREA (TEMPORARY) (56)

10 Four person tables

2 Eight person tables

2 EAST (61)

9 Single carrels

22 Double Carrels

2 Four person tables

(2 double carrels could be placed in the old Documents area)

2 CENTRAL (8)

2 Four person tables

3 EAST (69)

2 Single carrels

23 Double carrels

5 Four person tables

1 Single carrel for the disabled

3 CENTRAL (0)

(Could place 1 single carrel on the north wall)

4 EAST (58)

1 Single carrel

7 Double carrels

9 Four person tables

1 Four person index table

1 Two person table

1 Single carrel for the disabled

GRAND HALLWAY (17)

2 Sofas

13 Chairs

LUMIN AREA (67)

- 3 Single desks
- 13 Four person tables
- 3 Quad carrels

DOCUMENTS AREA (24)

- 6 Double carrels
- 3 Four person tables

SEMINAR ROOMS (78) (Note: These rooms have restricted access)

- 20 Three 2nd floor seminar rooms
- 40 Four 3rd floor seminar rooms
- 18 One 4th floor seminar rooms

CURRENT PERIODICALS READING ROOM (111) (Note: The space in CPRR is needed for people using current periodicals, there is not extra space for general studying)

- 1 Two person table
- 27 Four person tables
- 1 Single carrel for the disabled
- (There is room for one double carrel near the newsprint shelves)

REFERENCE AREA (166) (Note: The space in Reference is needed by people using Reference material. There is not extra space for general studying.)

- 2 Three person tables
- 40 Four person tables

SPECIAL COLLECTIONS (14) (Note: This area is restricted to users of Special Collections materials. There is no space for general studying)

- 1 Double carrel
- 3 Four person tables

ELLIS TOTAL (Excluding special purpose rooms, i.e. CPRR, Reference, Seminar, Special Collections): 871

ELLIS TOTAL (Counting special purpose rooms, i.e. CPRR, Reference Seminar, Special Collections): 1240

STUDY SPACE IN THE BRANCH Libraries

ANNEX I (12)

- 2 Four person tables
- 4 One person tables

ENGINEERING Library (90)

- 10 Chairs
- 8 Single carrels
- 12 Six person tables

GEOLOGY Library (53)

- 7 Chairs
- 2 Single carrels
- 2 Double carrels
- 10 Four person tables

HEALTH SCIENCES Library (365) (Note: Library access for undergraduates in restricted after 5 pm)

- 20 Chairs
- 212 Single carrels
- 31 Four person tables
- 1 Nine person table

JOURNALISM Library (78)

- 2 Chairs
- 4 Single carrels
- 18 Four person tables

MATH Library (21)

- 3 Chairs
- 2 Single carrels
- 4 Four person tables

TATE HALL (93)

- 7 Chairs
- 3 Two person tables
- 7 Four person tables
- 3 Six person tables
- 1 Ten person table
- 2 Twelve person tables

VETERINARY SCIENCES Library (104) (Note: Library access is restricted after 5 pm)

- 6 Single carrels
- 5 Double audiovisual carrels
- 5 Four person tables
- 12 Six person tables
- 2 Six person tables (seminar room)

TOTAL FOR BRANCH Libraries: 816

COMBINED TOTAL FOR ELLIS AND BRANCH Libraries: 2056

By any measure, Library study space on campus is woefully inadequate. At any one time only about 12% of the undergraduate population (based on the 1987 MU fall enrollment of 16,942 undergraduates) will be able to find Library seating on campus assuming the students spread themselves out equally among all of the campus Libraries.

Several national academic library standards recommend library seating for 20% to 40% of current student enrollment. To even meet the lowest standard (20%), MU Libraries would need an additional 1332 seats for

undergraduates. 1332 additional seats in reality is fewer than actually needed to serve MU undergraduates because the figure is based on the grand total of seating in Ellis and the branch Libraries. (Both the Health Sciences Library (365 seats) and the Veterinary Sciences Library (104 seats), serve mainly graduate programs, have limited space, and restrict undergraduate access after 5 P.M.) The other branch Libraries, though not closed to undergraduates, are open far fewer hours than the main Library, Ellis. Considering that Ellis is the main undergraduate study location on campus, (excluding branch Libraries from the study space count) the total number of available library study spaces drops from 2056 to 1240. This lower figure (1240) still includes 369 seats in Ellis Reference, CPRR, Special Collections, and seminar rooms which are reserved for users of those collections and can not actually be used as general study space. Taking the above restrictions into consideration, in order to reach the minimum standard of seating for 20% of the undergraduate population, Ellis Library actually needs 2517 additional study spaces.

Lack of study space adversely impacts other Library services. Students studying at Ellis Reference index tables prohibits others from using those indexes and other reference materials. Students needing to read a current issue of a journal cannot find a place to sit in Ellis Current Periodicals Reading Room because of students studying there.

Lack of adequate study space has forced the libraries to create seating in locations not really conducive to studying. Study tables placed between the Information Desk and the LUMIN terminals on the 1st Floor of Ellis are actually unsuitable for studying because of the noise and LUMIN activity that area.

Finally, in Ellis there are only eight public study stations in the five floors of west stacks (1A West, 2 West, 2A West, 3 West, and 4 West) while there are 82 locked graduate student carrels. This lack of open seating in the Ellis stacks means that to use books located there or to browse through them students must transport the volumes to another location. This not only inconveniences students, but it also increases reshelving turnaround time.

Recommendation 29

During the inventory of study space the Subcommittee found locations for fourteen additional study spaces in Ellis Library:

2A West--Add one single carrel at the southeast end.

2 EAST --Place two double carrels in the old documents area. Additional carrels may be possible if the walls of the old documents offices are torn down.

3 CENTRAL--Place one single carrel on the north wall.

4 EAST--Place four double carrels along the south wall of 4 East.

In addition, Instruction Room I could be unlocked to allow student access for studying every week night and weekend.

It is important to have study space in the Ellis Library stacks.

It is the Subcommittee's perception that few of the graduate carrels are used with any regularity. Whenever a locked graduate study carrel located in the west stacks becomes available it should be converted to an open study unit available to anyone. This will gradually increase the number of study stations in the west stacks by 82 stations. Hopefully the locked graduate study carrels which are lost could be replaced when the next addition to Ellis is built. Additional study space should be planned for the next addition to Ellis Library. The majority of the new units should be single, double, or quad carrels which allow for private study and promote quiet studying. Carrels are an efficient use of space since many people do not like to sit next to strangers at a study table. The quad carrels located in the most recent Ellis addition on the 1st Floor have proven popular with students. A few rooms in the new addition should be designated for group study since such space is frequently requested by students. At the present time, only four seminar rooms on the 3rd and 4th floors can be used as group study rooms and these rooms are frequently reserved for classes. The offices in the old documents area on 2nd Floor East could be converted to small group study rooms. Due to the pressing need for additional space to house books in the Library, the Library will never be large enough to accommodate all of the students on campus who need a quiet place to study. Other places on campus need to be considered for study space (perhaps the next addition to Brady Commons and the Memorial Union--the cafeteria and Bengal Lair could serve as study areas after hours).

III. Bibliographic Instruction Facilities

Description and Assessment

Ellis Library has two rooms reserved for bibliographic instruction. Instruction Room I is reserved for the Library Skills classes. Instruction Room II is reserved for course related instruction, faculty seminars, and other workshops. These two rooms are described below. Branch Libraries reserve classrooms in the buildings where they are located when instruction sessions are needed.

INSTRUCTION ROOM I. ELLIS Library (17 feet by 36 feet)

- 33 Wooden chairs with arms for note taking
- 1 Green padded chair
- 1 Brown padded chair with arms
- 1 Wooden straight chair
- 2 Overhead projectors
- 1 Portable screen
- 1 Built in blackboard
- 1 Lectern
- 1 Table
- 1 Desk
- 1 Supply cabinet
- 1 Coat rack

INSTRUCTION ROOM II. ELLIS Library (14 feet by 41 feet)

- 52 Brown metal folding chairs
- 6 Green padded chairs
- 9 Wooden chairs
- 2 Overhead projectors
- 1 Portable screen
- 1 Portable blackboard
- 3 Small desks
- 1 Vivid Limelight projector

The main strength of Ellis Bibliographic Instruction facilities is that there are two rooms reserved for instruction within the main Library building. For many students, attending a library instruction session, is the first time they have been in the Library and it forces them to actually find it. Having rooms in the Library makes it possible for librarians to bring reference tools and CD-ROM's equipment to classes for demonstrations. Sessions offered in the Library also makes it possible to combine tours of the Library with librarian instruction.

The Vivid Limelight projector allows librarians to do live demonstrations of LUMIN, online databases and CD-ROMs

Both instruction rooms in Ellis are located in difficult to find areas on 4th Floor East. Whenever instruction sessions are held, signs must be posted all over the building showing the location of the rooms and despite these efforts students still cannot find the rooms. Librarians sometimes decide to meet classes on the first floor entrance of Ellis, but this usually creates noise and confusion and wastes valuable class time. Also the presenter is usually a little winded after climbing all the stairs to the 4th Floor.

Both instruction rooms, especially Instruction Room II, are much longer than they are wide. Most sessions involve transparencies or a projector.

Students sitting more than half way back in the room have difficulty seeing the screen.

There are no smaller rooms available for workshops. There are some seminar rooms on the 3rd and 4th Floors, but they are not suitable for audio-visual and computer demonstrations.

For many students, the instruction rooms are the first impression they get of the Library. In both rooms the furniture is old and mismatched and the metal folding chairs in Instruction Room II are not conducive to note taking.

Bibliographic Instruction Facilities:

Recommendation 30.

Remove the non-matching chairs in both bibliographic instruction rooms to give the rooms visual consistency. In Instruction Room II the metal folding chairs should be replaced with chairs with arms for note taking. New instruction rooms, in easy-to-find locations, should be included when designing the next addition to Ellis Library. A seminar room equipped for A-V presentations should be built along with two bibliographic instruction rooms. The instruction rooms should be closer to the first floor public service areas to make the combination of tours with instruction sessions easier and to facilitate the bringing of reference tools to sessions. The rooms should not be as long and narrow as the present instruction rooms and should contain built-in black boards and projector screens. Tables equipped to accommodate computers, projectors and other state-of-the-art audio-visual equipment are also needed in the rooms.

IV. Signage

Description and Assessment

Signage is essential for helping students locate the materials and services they need in the various campus Libraries. The Library produces most of its signs on a sign press owned by the Library. A sign room is located on 4th Floor East of Ellis and houses the sign press and other supplies needed to produce signs. Occasionally temporary signs are created on a computer. Six different types of signs are produced in-house: orientation, identification, directional, instructional, regulatory, and current awareness.

To many students, the Library especially Ellis, is a maze. Proper signage helps alleviate the confusion. Producing signs in-house on the sign press and computer allows the Library to create inexpensive and tailor-made signs. Signs can be made immediately when special problems occur. The sign press also allows the Library to create signs for the monthly displays exhibited in the cases located throughout Ellis Library.

Two inch high lettering is the largest size that can be produced in-house by the Library. Larger signs are needed to clearly identify the key service points in Ellis Library: Reference, Information, Circulation, Reserve, Current Periodicals, Copy Service, Documents, and Special Collections. The Library also needs to avoid the clutter and confusion of too many signs in one small area.

Signage:

Recommendation 31.

Install large, stencilled professionally produced signs to identify the main service points in Ellis Library. (Note: this recommendation was implemented and signs installed over Christmas Break 1988-89). Signs identifying other points in the library have been submitted on bid and are waiting installation. Once professional signs are installed, the Library can examine problem areas to see how other signs can be streamlined and consolidated.

V. Branch Libraries

Description and Assessment

The University of Missouri-Columbia Library system has six branch Libraries, Health Sciences, Veterinary Medical, Engineering, Journalism, Geology, and Mathematical Sciences. This section will describe and assess the facilities of those branch Libraries. The Law Library, administered by the Dean of the School of Law, is not included in this evaluation. The four storage facilities administered through the Library system also will not be assessed.

In colleges or universities, branch Libraries are Library units administered through a central (main) Library but physically located within the facilities of an academic unit such as a school, college, or department. Branch Libraries are responsible for providing basic Library services to their affiliated academic units. These services include, but are not limited to, reference service, circulation control and stacks maintenance, class reserve collections, collection development, faculty liaison, Library instruction and new student orientation. Other Library functions, such as acquisitions, cataloging, and fiscal control are usually performed by the central library. The Branch Libraries on this campus generally conform to this model, with some exceptions from one unit to the next.

This section uses and builds on a report by Sasaki and Associates, Library Evaluation and Facilities Program Plan, December 1981. On page eleven of that report Sasaki and Associates state that "The quality and functional organization of Ellis Library and most of the branches are extremely dreary, overcrowded, badly furnished, and often poorly arranged." And "The consultants find much of the Library space to be of poorer quality than any of the university Libraries which with they have worked."

Since the completion of the Sasaki report, the new J. Otto Lottes Health Science Library has opened. It provides four times the assignable square feet and number of reader stations than the old health sciences facility and has extensive media (audio-visual and slide-tape) facilities available for students. The Health Sciences Library provides Library service to the College of Medicine, the Schools of Nursing and Allied Health Professions, and the University Hospital and Clinics.

The Veterinary Medical Library, located in the Veterinary Medical building, was constructed in the late 1970's. Although the Veterinary Medical program is primarily graduate and professional, some "pre-vet" undergraduate students use the Veterinary Medical Library through a program taught through the College of Agriculture. The Veterinary Medical librarian estimates that undergraduates constitute no more than fifteen percent of the total use of the Veterinary Medical Library collection.

The Engineering Library has been seriously overcrowded for at least a decade. A large quantity of their collection is located in storage and the Library is not air-conditioned; there have been environmental control problems during the summer months. This situation will change when the new Engineering Laboratory and Classroom facility which will house a new Engineering Library is completed. The new Library will provide three times the assignable floor space and four times the number of reader stations.

In 1981, Sasaki and Associates (page 11) stated that space in the Journalism Library is already "at the saturation point" and according to the Journalism Librarian, library space has not increased since that time. A major expansion and renovation project was at the point of being funded in FY 1987, but was suspended for budgetary reasons.

The Geology Library has sufficient collection space for the foreseeable future and recently had a new climate control system installed.

The Mathematical Sciences Library, which serves the departments of Mathematics, Statistics, and Computer Science, has serious deficiencies in all three standards of user space, collection space, and staff and services space. Large quantities of materials continue to be transferred from the Math Sciences Library to storage.

The major advantages of the Branch Libraries is that they bring faculty and students into close proximity with related Library collections. MU Branch Libraries tend to be heavily used and several branches have special collections, such as audio-visual materials, newspapers, and maps. Branch Libraries combine functions in one location rather than divide them the way academic units served through Ellis Library are divided between the Library and the academic department or division. Branches serve as departmental reading rooms, laboratory reference centers, and, because of their accessibility, as substitutes as large personal library collections for academic faculty. The major problem with branch Libraries is that facilities

planning requires negotiation with the affiliated academic unit. These negotiations, and their results, are sometimes tedious and unpredictable.

BRANCH Library DATA

Library Unit

	Health Sciences	Geology	Vet Medical	Journalism	Math Science	Engineering (present)(proposed)	
Building Space (a.s.f)	21370	974	4202	939	721	1334	5500
User space	20431	2567	2257	1497	950	2101	5900
Stacks	7393	76	1028	359	217	594	800
Staff/service	49194	3617	7487	3795	1888	4029	1200
Holdings							
Volumes	178769	30169	40324	21662	33312	66103	
Serials	1903	581	711	368	411	553	
Ann. growth	8500	800	1750	350	700	1500	
Spec. Collections	A - V	A - V	A - V maps/ 125,000	Newspaper			
Library staff FTE	27.5	2.3	4	5.3	2.2	3.5	
Items Lent							
FY 1988							
regular	48880	5746	12486	10196	8057	10229	
reserve	39764	5139	n/a	13062	2762	7762	
Total lent	88644	10885	12486	23252	10819	17991	

Figure 10

Branch Libraries:

Recommendation 32.

Fund and implement the expansion and renovation project already planned for the Journalism Library as soon as possible. Significant additional space should be made available to the Mathematical Sciences Library, otherwise the collection will need redefinition. It could become a static collection, where older books are transferred to storage as new materials are acquired; or books on a particular subject might be separated from the existing collection and transferred to another branch or Ellis Library. The computer science collection is a logical candidate for transfer to Ellis, because it is heavily used by students from all disciplines on campus.

VI. Audio-visual Facilities

Description and Assessment

Ellis Library offers few audio-visual instructional materials. Three of the branch Libraries do collect Audio-Visual materials which are funded through their affiliated academic units. The Academic Support Center (ASC), administered through the Office of Provost, provides various media technical services and maintains a Film and Video Library on a rental basis.

There is no campus-wide Library model walk-in audio-visual instructional materials center available to undergraduates. Film materials suitable for such a center are not routinely collected by any campus agency. Materials available from the film Library are not searchable on LUMIN, the UM computerized database.

Audio-Visual Facilities:

Recommendation 33.

Consider locating a walk-in Library-model audio-visual instructional facility in a new addition to Ellis Library. Ellis and the branch Libraries should house A-V instructional materials in support of the instructional programs of the campus, with technical supervision and support provided through the Academic Support Center (ASC). ASC should become a cataloging center and their holdings entered into LUMIN. ASC should implement a comprehensive program of cataloging and circulation/rental control for the Film Library.

VII. Computers, Equipment, and Labs.

Description and Assessment

LUMIN Terminals: The main concentration of public LUMIN terminals is on the first floor of Ellis Library (1 Central). There are thirty terminals, including two terminals at sit-down tables and 5 printers (only 3 printers were in working order, May 1989). Ten of these LUMIN terminals were installed in October 1988. There is also a LUMIN terminal for public use in the Current Periodicals Reading Room, and in the Special Collections Department. LUMIN can be accessed via dial-up by anyone who has a computer, a modem and communications software (a free copy of PROCOMM or MacKermit communications software can be obtained from UMC Computing Services). UMC has a site license for PROCOMM and MacKermit.

Microcomputing Lab: The Microcomputing Lab is located in Ellis Library on the north side of the east wing, 4th Floor East (room 4D12). Twelve IBM and Macintosh personal computers are available for student use and software can be checked out at the Reserve Desk. The Lab is run by UMC Computing Services. The Health Sciences Library has a microcomputer lab available to health sciences students, but other branch Libraries do not have microcomputers for walk-in student use.

Typewriters: There are six electric typewriters located on the north side of 4th Floor East, next to the Microcomputing Lab (room 4D12, 4 East). These typewriters are available for student use on a first-come first-serve basis. Users must supply their own paper and correction aids. These typewriters were purchased with student fees and are now actually owned by Ellis Library. The Library pays for one-half the maintenance costs and purchases the ribbons at a cost of \$1500 a year.

CD-ROM Stations: The CD-ROM stations in Ellis Library are located in the Reference Department (1 South). The five CD-ROM stations located there each accesses a different database. There are also four IBM PC's connected to a laser disk to provide access to Infotrac. These will be converted to CD-ROM in Spring 1989.

Copy Service: Copy Service is located on the 1ST Floor Ellis Library (Room 115, 1 North). This location was chosen for the Copy Service during the last remodeling. The space appears to be large enough and is conveniently located next to the Current Periodicals Reading Room. The following equipment is available for patron use: fifteen regular copy machines (including four coin operated machines in the Current Periodicals Reading Room), two microfiche reader/printers, and one microfiche/microcard reader/printer. Some machines are capable of making enlargements and reductions. Some branch Libraries lack internal photocopy facilities.

Special Collections: The Special Collections Department is located on 4th Floor West of Ellis Library. This department houses the majority of microforms in Ellis as well as the rare books collection. Machines for viewing microforms include the following: fifteen microfilm readers, five microfiche readers, four microfilm reader/printers (two which are coin operated), three microcard/microprint readers, and three opaque readers. The microfilm readers are new and the microprint readers are working satisfactorily. There is also a LUMIN terminal and printer located in this area. Of the twelve microfiche readers, located in the Reference area in 1 South, several are heavily used, especially for ERIC, College Catalog Collection and Phonefiche. The Subcommittee recommends that additional microfiche readers be purchased for 1 South.

Recommendation 34

Install additional LUMIN terminals on the 2nd, 3rd and 4th Floors of the East side of Ellis. A greater number of students use the east side of the building because the largest concentration of book stacks are located there. This would allow greater access to LUMIN, since students would not have to return to the 1st Floor each time they wanted to search LUMIN for a call number.

Installation of terminals on 2nd Floor East, 3rd Floor East, and on 4th Floor would require a separate IBM 3174 protocol converter on each floor, at a cost of \$4000 apiece. Two modems would be needed for each protocol converter, at a cost of \$400 apiece. Initially one or two terminals could be put in these locations, with more terminals to be added as funding becomes available. Each terminal would cost \$350 plus \$175 for each table. The

monthly cost for the phone line would be \$15.00 a month for each protocol converter.

The initial wiring for each location would cost approximately \$2000 for each floor or \$6000 for the east side of the building. The telephone wiring that is in place now on the east side of the building is only for phones which would connect to the main reference desk. A more economical alternative recommendation than the one outlined above, would be to install only one protocol converter and terminals on third floor east. Lines from this protocol converter could be run to second floor east for terminals, and also to fourth floor east for terminals. Another option would be to run lines to the upper floors from the Renex which is located in the Circulation Department which still has ports available. A major concern in placing terminals on different floors, is how the terminal equipment will be monitored and who will provide help to users. One option is not to attach printers to the LUMIN terminals on the upper floors because of frequent equipment problems, paper maintenance, and vandalism.

Locate two LUMIN terminals in the new location of the Recorded Sound Collection, 2nd Floor Central. The conduits for LUMIN wiring are still in place there. Two lines could be run from the protocol converter on the 4th Floor down to the 2nd Floor Central. The wiring for this would cost \$300. Two terminals and two tables would cost \$1050.

Evaluate adding terminals to the west side of Ellis Library utilizing the protocol converter in Special Materials which has eight ports still available for use. Since there is only one terminal in Special Collections, if two ports were used in the new Recorded Sound Collection area, these would still be six lines available. Additional terminals could be located on 2nd Floor West or possibly 4th Floor West in the old Library Science Reading Room.

Install six more LUMIN terminals in the 1st Floor Catalog area bringing the total there to thirty-six terminals. Additional terminals are needed in this area because it has the greatest concentration of LUMIN users and the protocol converter there has six unused ports. The Subcommittee recommends that the following questions be decided before future LUMIN equipment is purchased: will more LUMIN terminals be needed in the future in the 1st Floor LUMIN area in Ellis; should this area be the priority area for placement of additional terminals; should another one or two protocol converters be purchased, so that an additional ten to twenty terminals could be added, if the 1st Floor LUMIN area is expanded. Another question that needs to be addressed (especially in light of another Ellis addition) is whether the present 1st Floor LUMIN location in the best or most desirable location for accessing LUMIN in Ellis Library.

Install more printers to the terminals in the 1st Floor LUMIN area so that there is a printer for every other terminal. This would require the purchase of ten additional printers. The Okidata 182+ printer costs \$250. Thus ten printers would cost \$2500. Additional costs for paper, ribbons, and maintenance should also be considered.

Acquire stools for every other terminal in the 1st Floor LUMIN area. Students informally surveyed indicated that they liked to sit-down while using the terminals. An average quality stool costs \$120; fifteen stools would cost \$1800.

Study the location of the Information Desk in relation to the LUMIN terminals. Questions to be decided are: Should the Information Desk be moved to a location nearer to the LUMIN terminals or should LUMIN terminals be installed closer to the Information Desk where the study tables are now located? The wiring for this would cost approximately \$2000. The Services Subcommittee is also looking into this situation.

Publicize dial-up access to LUMIN. More students would take advantage of this service if they knew about it.

Recommendation 35

Double the size of the Ellis Library microcomputer lab by using the present adjacent Library Instruction Room II (provided additional instruction rooms are available in the new addition). This would allow space for a total of twenty-four microcomputer workstations in the lab. The Subcommittee recommends that in any expansion of Ellis Library, the lab should be enlarged to accommodate up to fifty workstations and it should be relocated in a central location in. The committee recommends that the microcomputer lab consistently maintain the same hours of operation as Ellis Library even during Spring Break and Intersessions. See Recommendation 17.

Recommendation 36

Add six new typewriters for student use outside the present Ellis Library microcomputer lab. Ensure that they are regularly maintained.

Recommendation 37

Acquire a CD-ROM workstation as station on which new CD-ROMs could be tested. At the present time, if we test a CD database on a trial basis, there is no CD-ROM workstation available for the test. An Hitachi 1503S costs \$700. A serious problem with CD-ROM stations is that only one user can access the database at a time. The Subcommittee recommends evaluating the possibility of purchasing equipment to provide multi-user access to one CD database through networking so users at one terminal can access all the CD-ROMs from a single terminal. Plans also need to be made for additional workstations in the future.

Recommendation 38

Replace the older regular copy machines in Ellis (which are seven Xerox 4000 machines), with new Xerox machines. New machines would meet preservation guidelines, and would be capable of "edge copying" of books. Install two additional coin operated copy machines in the Current Periodicals Reading Room, and two additional machines in the Copy Service area to handle increased patron usage. Coin operated machines are suggested for the present in CPRR, because of concern about theft of auditrons. At some point, if the copy price is raised above five-cents, auditrons will have to be used. Evaluate installing some machines which would use charge cards. However, there is a problem with having the same card system being used at various campus locations. At the present time a suggestion has been sent to the MU Business Office to investigate the use of a master system for the entire campus. Every branch Library should have internal photocopy facilities, preferably auditron-operated, rather than coin-operated, because of better machine quality and copies. If a branch Library location doesn't have the photocopy volume to support an auditron-operated copier, perhaps some arrangement can be made with the affiliated academic unit to merge Library and academic unit operations in order to achieve the necessary volume. Purchase two additional coin-operated microfilm reader/printers in Ellis Copy Service. This would allow greater student access to this type of machine and could be used when the Special Collections Department was not staffed. Plan to purchase new microfiche readers. The existing ones were purchased in 1977 and 1980, are wearing out, and will need to be replaced at some time in the future.

VIII. Recorded Sound Facility

Description and Assessment

Ellis Library has 912 square feet devoted to the Recorded Sound Collection in seven different rooms: The staff office (131 sq. ft.); Stack Area (464 sq. ft.); Equipment Room (160 sq. ft.); Listening Room (3 at 34 sq. ft. and 1 at 55 sq. ft.). The 4th Floor location has provided adequate space for past needs and was in an acceptable location under the Library's subject divisional arrangement with the print music collection on 4 East (these materials are to be moved). The AAM staff was also nearby to provide backup staffing when needed.

With the reorganization of the bookstacks into one LC and one Dewey classification sequence, music books may no longer be located on 4 West. With the move of the AAM staff to the Reference Department on 1 South, the staffing rationale for keeping the Recorded Sound Collection on 4 East also disappears. Recorded Sounds out-of-the-way location at the back of 4 East is inconvenient for easy patron access.

Recommendation 39

Move Recorded Sound to the 2nd Floor in the former location of the Card Catalog and the former office of the supervisor for the Copy Service (Room 212). Room 212, with floor to ceiling walls could, with minimal expenditure, be converted to listening carrels. It would be necessary to construct walls to provide a secure area for the record stacks in the old Card Catalog area but the Services Desk and the staff work area could be located outside the enclosed stacks to increase visibility. In addition to providing services for the Recorded Sound Collection, staff, because of their central location on the 2nd Floor, could provide directional and LUMIN assistance to patrons.

Cooperation With Units

Library Services To Undergraduates
Cooperation With Other Academic Units Subcommittee

Cooperation Subcommittee Members:

Goodie Bhullar
June DeWeese
Margaret Howell
Paula Roper, Chair

The library supports undergraduate programs through contacts with many other academic units on campus. This Subcommittee chose to study library service to eight representative academic units: the Campus Writing Program, the Chancellor's Leadership Class, the Honor's College, the Learning Center, the Freshman Year Experience, Summer Welcome, the Office of Teaching Assistant Training and Development and the Total Person Program. A contact person from each unit was interviewed by a member of the Subcommittee and asked to assess the current level of library service including library publicity, brochures and adequacy of library collections. They were also asked to make recommendations for improving library service to their unit. Although many of the contact persons had only a general idea about the library and its services, many felt the library served undergraduates well.

I. Campus Writing Program

Description And Assessment Contact Person--Doug Hunt

Through this program writing intensive classes are offered by number of academic departments to help students develop critical thinking and writing skills. Participants in the Campus Writing Program take advantage of all the services offered by the Libraries (See the Library Services Subcommittee Report page 9-27). Prior to the beginning of each semester, librarians contact faculty teaching writing intensive courses and offer assistance if needed.

The contact person was unaware of any specific publicity efforts made by the library to reach this program and had not seen library brochures prior to the interview. He felt the library collections offered very good support for writing intensive classes although problems sometimes arose when too many students in a class were trying to use one or two copies of a reference tool or were competing for the same article or book.

II. Chancellor's Leadership Class

Description And Assessment Contact Person--Virginia E. Booker

The Chancellor's Leadership Class is composed of carefully selected students who participate in structured exercises and experiences designed to stimulate their leadership potential. Participants in this program utilize library services much as any other undergraduates.

The contact person was unable to see ways in which the library might offer support to the Class except for the fact that the students used it as part of their course requirements. She felt the library did a good job supporting course related needs. She said that students in the Leadership class responded positively to the adequacy of library collections, publicity and other promotional efforts.

III. Honors College

Description And Assessment Contact Person--Ed Kaiser

The Honors College offers smaller, more challenging courses for academically superior students. In addition to the services offered by the Libraries, the Library conducts tours each semester at the request of faculty teaching Honors courses.

The contact person felt that Library service was very good. He did not seem to be aware of the complete range of services offered by the library. However, because students make such high use of library materials, he felt that the collections were better than some faculty assume.

IV. Learning Center

Description And Assessment Contact Person--Bonnie Zelenak

The Learning Center provides both group and individual programs for students needing assistance with class work and such basic academic skills as studying, reading, or writing. The Library has no special program aimed at Learning Center clientele other than making information on Library hours available there.

The contact person was pleased with the library and felt it met undergraduate needs well. She felt that library publicity was more captivating than informative, but said that forced students to take the initiative in finding out more about the library by using its resources. LUMIN brochures were judged to be informative but not instructive. She said the Library might consider offering library instruction sessions earlier in the semester.

**V. Freshman Year Experience:
Learning Strategies for College Students**

Description And Assessment Contact Person--Bonnie Zelenak and Mary Bixby

The Freshman Experience Course is a three credit hour course for incoming students wishing to improve their study techniques and gain an understanding of the overall structure of the university. In addition to general service, the Library's Assistant Director leads one of the small discussion sections. The contact person said that Library publicity was more captivating than informative but still motivated students to find out more about services offered. Services were judged to be timely and collections deemed adequate for undergraduates.

VI. Summer Welcome

Description And Assessment Contact Person--Denise Schlake

Summer Welcome is a campus orientation program for incoming freshmen and transfer students. It is intended to make students feel more at ease in the university environment and make the transition to university life easier. In addition to general service, the library has an Information Table for students at Summer Welcome and participates in training tour leaders. The contact person was aware of various library resources and services through the publicity put out by the Library but since she was not an academic, she did not feel capable of judging the adequacy of the library collections but did like the way materials were displayed in the Current Periodicals Reading Room. Library brochures should give cursory information and refer a person to where they could locate more detailed information.

VII. Teaching Assistant Training and Development Office

Description And Assessment Contact Person--Diane Vom Saal

This office offers training and support for teaching assistants from all disciplines on campus. The Library's Bibliographic Instruction Coordinator has participated in the teaching assistant training offered prior to the beginning of Fall Semester classes and has contributed information about Library programs to the handbook prepared for all teaching assistants.

The contact person said that the fact that library staff is available to work with personnel of various departments and programs on campus is the real strength of the Library's program. She said that the Library subscribes to a good range of magazines and journals.

VIII. Total Person Program
Department of Intercollegiate Athletics

Description And Assessment Contact Person--Chris Sinatra

The Total Person Program provides academic and personal counseling to all students certified to compete in intercollegiate athletics. In addition to general service, the library has been involved with the Study Skills Improvement Program, and conducts tours each semester for participants. Student athletes are encouraged to take the Library Skills course and program instructors teach a session on library skills. The contact person felt that library publicity, services, adequacy of collections and brochures were very good.

Recommendations

The eight contact people surveyed had a number of suggestions on how to improve library service to campus units outside the library. Based on these suggestions, the Subcommittee recommends that:

Recommendation 40

Appoint library liaisons for other academic units on campus needing library service. Liaisons would be responsible for maintaining contact with these units, distributing various library materials, and keeping them informed of library events, services and resources. In the past, liaisons have only been appointed for academic departments but since a significant educational role is being played by other academic units and many seem unaware of the full range of services available to them, liaisons should be appointed for them also.

Recommendation 41

Because the need for greater contact between the library and other academic units, the library should hold an annual meeting and invite representatives of all the other divisions on campus. It should feature a brief presentation on library services, introduce key staff, explain library resources and future events, allow a few questions from participants and conclude with an informal reception.

Recommendation 42

Assign a department in the library the responsibility for coordinating library publicity of interest to other units on campus. (See the general recommendation for publicity in the Services Subcommittee report and Recommendations 1, 14, and 18). Librarians should contribute articles to newsletters published by other academic units, use the MISSOURI WEEKLY to communicate with faculty and regularly advertise Library programs in the MANEATER. Display library brochures explaining how to find library materials more effectively using racks or stands rather than tables.

Clearly mark all service areas in Ellis so that students can easily find them (See Recommendation 31.) Explore the use of non-print media, such as videotapes, to present information about the library to undergraduates and show it at various sites on campus. Make a lounge area in Ellis where anyone might go for a short study break. (See Recommendation 16)

Recommendation 43

Librarians should participate in General Honors 35, a one hour discussion course on academic topics sponsored by the Honor's College and should work towards creating an Honor's Section of Library Skills.